

K

KRAMER BROTHERS

DAYTON 4, OHIO

17 DELL ST.

FU 4196

Catalog No. 7

September, 1955

HIGHWAY, STREET

and

SEWER CASTINGS

FOREWORD

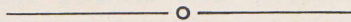


WE ARE PROUD TO PRESENT OUR COMPLETELY NEW 1955 CATALOG OF HIGHWAY, STREET, AND SEWER CASTINGS.

THIS CATALOG IS DESIGNED ESPECIALLY TO ASSIST THE ARCHITECT, THE ENGINEER, AND THE CONTRACTOR, IN SPECIFYING AND USING THE CORRECT CONSTRUCTION CASTING FOR THE JOB.

BECAUSE OF THE INCREASED DEMAND FOR NEW AND IMPROVED DESIGN, WE ARE CONSTANTLY ADDING NEW PATTERNS. FROM TIME TO TIME, WE WILL ISSUE ADDITIONS TO THIS CATALOG, WHICH WE ASK THAT YOU INSERT IN THE BINDER.

IN THE EVENT THAT THE CASTINGS SHOWN IN THIS CATALOG DO NOT MEET YOUR REQUIREMENTS, WRITE US GIVING DETAILED SPECIFICATIONS OR DRAWINGS, AND WE WILL BE HAPPY TO OFFER OUR SUGGESTIONS AND QUOTATIONS.



THE KRAMER BROS. FOUNDRY CO.

DAYTON 4, OHIO

Quality Gray Iron Castings

GENERAL SPECIFICATIONS

1

Castings are made from properly selected and compounded materials, conforming to A.S.T.M. Designation A-48-48, Class 30 Iron or to United States Government specification QQI-652 for cast gray iron, having a tensile strength of at least 30,000 PSI, being of tough and close even grain.

2

All castings shall be of highest uniform quality free of cracks, shrink or blow holes, non-porous or other rejectable defects. All castings are cleaned by rattler or shot blasting to a smooth surface which shall be coated with a coal-tar pitch varnish, providing a smooth tough coating that will not scale off.

3

All round lids shall fit truly and securely into the frames with the contact surfaces providing a firm even bearing without rattling. The lid and frame bearing areas to be machined if specified.

4

All castings are to be made in accordance with standard patterns as defined by standard drawings and specifications. All weights and dimensions are an approximate average and any variation will not exceed the limits specified by A.S.T.M. Standards, or said standard specifications as submitted to our office. Dimension specifications shall prevail over weight allowances in all cases of estimated design.

SPECIFICATION DATA SHEET

ALL DIMENSIONS ARE IN INCHES

ALL WEIGHTS ARE IN POUNDS

ALL WEIGHTS ARE APPROXIMATE

ABBREVIATIONS

B = BAR WIDTH

G = GRATE

ID = INSIDE DIMENSION

O = OPENING

P = PIPE SIZE

T = THICKNESS

C = CURB LENGTH

H = HEIGHT

L = LID COVER

OD = OVERALL DIMENSION

S = SLOT OPENING

WT = WEIGHT

**ROUND LID DESIGN
ABBREVIATIONS**

C = CHECKERED

D = DIAMOND

I = INDENTED

K = KNOBS

W = WHEEL

**ROUND GRATE DESIGN
ABBREVIATION**

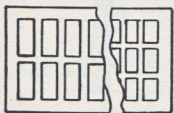
B = BAR TYPE

C = CROSS TYPE

R = RIB TYPE

S = SLOT TYPE

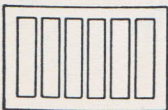
**SQUARE AND RECTANGULAR GRATE DESIGN
ABBREVIATIONS**



CB

CB = CROSS BAR TYPE

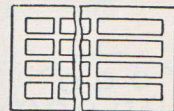
CR = CROSS RAIL TYPE



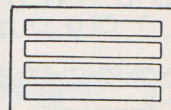
CR

LB = LINEAL BAR TYPE

LR = LINEAL RAIL TYPE



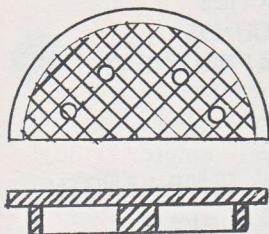
LB



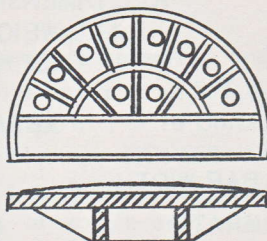
LR

MANHOLE LID DESIGNS

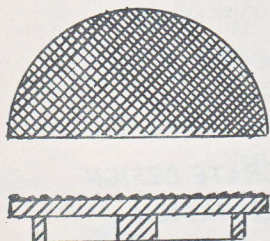
TYPE C LID



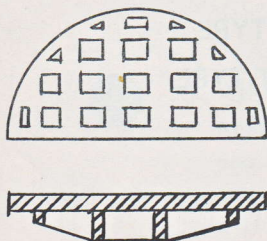
TYPE W LID



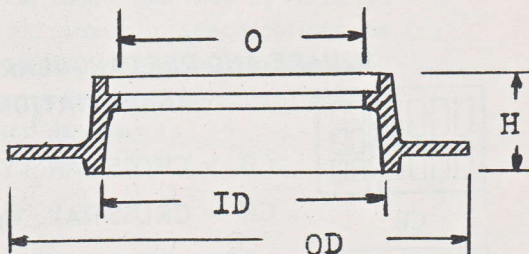
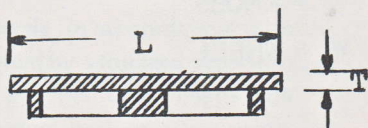
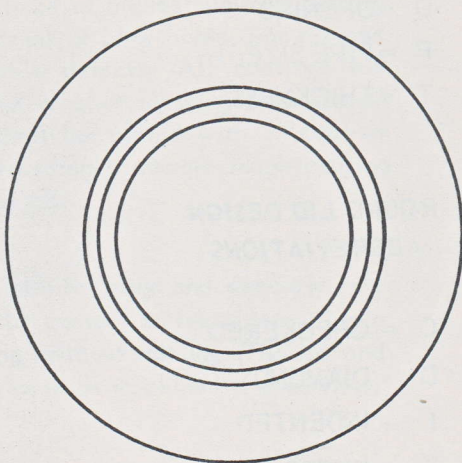
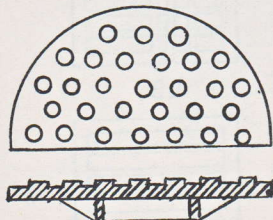
TYPE D LID



TYPE I LID

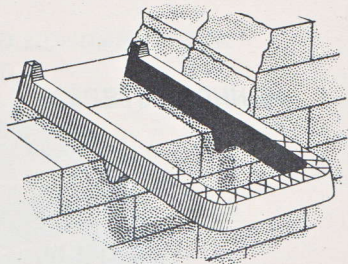
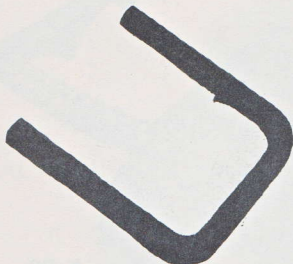


TYPE K LID

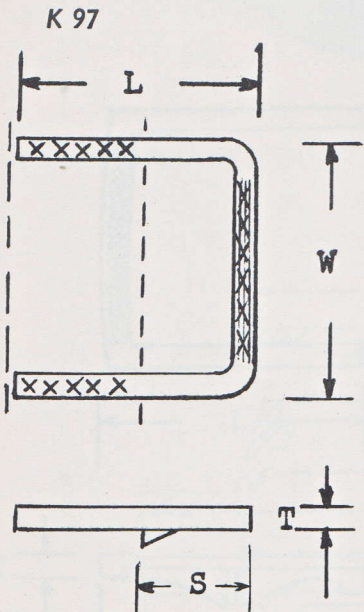


Furnished with machined bearing areas
if specified

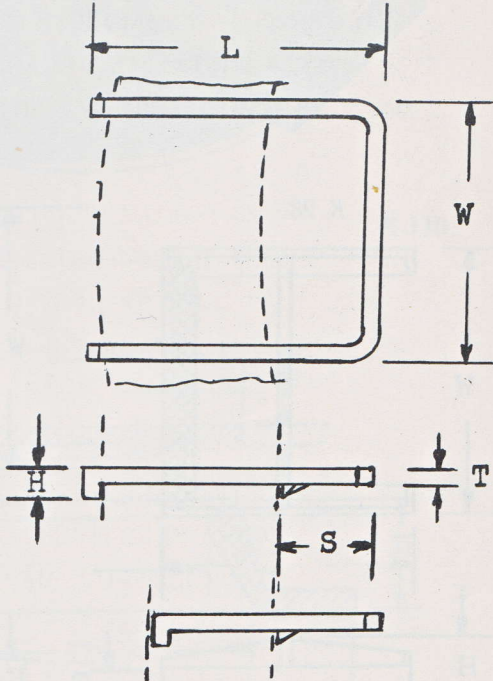
STANDARD MANHOLE STEPS



K 95



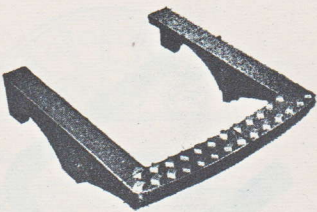
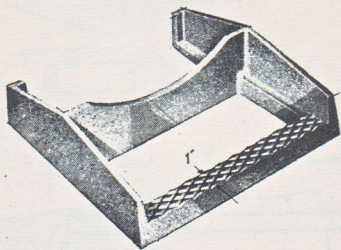
K 97



| CAT. NO. | W | L | T | S | H | WT. |
|----------|-------|----|-------|-------|-------|-----|
| K 94 | 10 | 10 | 3/4 | 4 1/2 | 1 1/4 | 4 |
| K 95 | 10 | 12 | 3/4 | 4 1/2 | 1 1/4 | 4 |
| K 96 | 12 | 10 | 3/4 | 4 1/2 | | 4 |
| K 97 | 9 1/2 | 11 | 1 1/4 | 5 | | 8 |

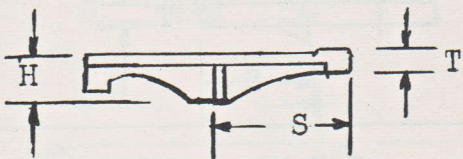
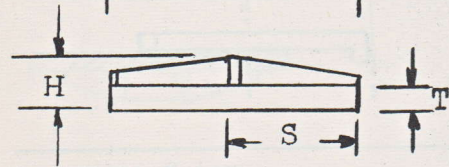
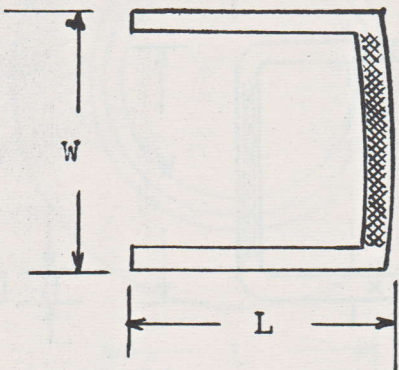
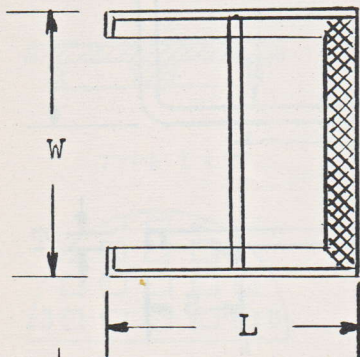
Designed for Brick, Block or Monolithic Manholes

MANHOLE STEPS



K 99

K 98



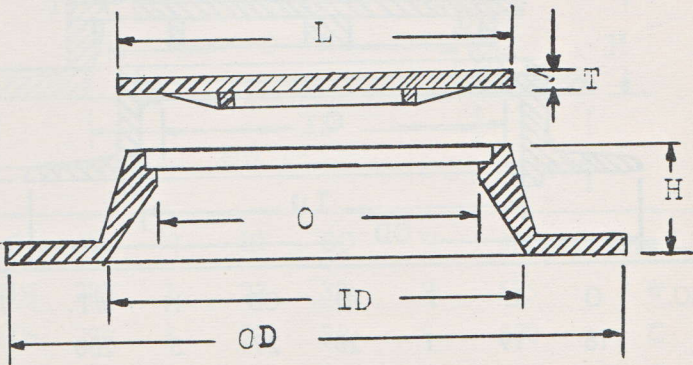
| CAT. NO. | W | L | T | S | H | WT. |
|----------|----|-----|----|----|----|-----|
| K 98 | 10 | 10 | 1 | 5½ | 3 | 10 |
| K 99 | 10 | 11¼ | 1¼ | 5¾ | 2½ | 11 |

All Steps are Asphalt Coated
and Rust and Corrosive Resistant

ROUND LAMP HOLE COVER AND MONUMENT BOX



K 110



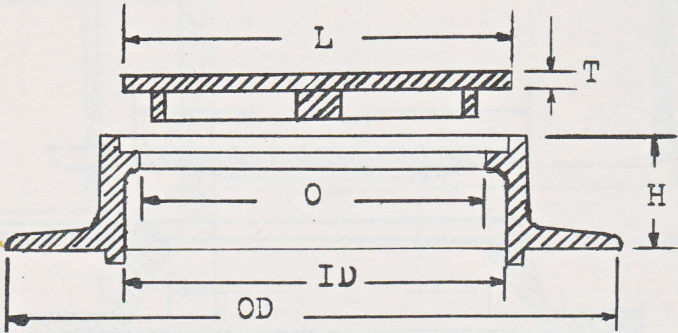
| CAT. NO. | O | L | T | ID | OD | H | WT | Type Lid |
|----------|-----|-----|---|----|----|----|-----|----------|
| K 109 | 11½ | 14¼ | ¾ | 15 | 25 | 14 | 300 | Special |
| K 110 | 14½ | 15½ | ¾ | 18 | 25 | 8 | 125 | Special |

Write for Prices and Information

CITY OF DAYTON
STANDARD MANHOLE COVERS



K 122



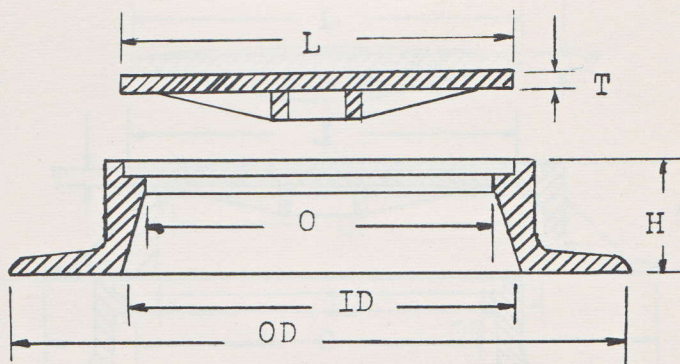
| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|-----|-----|---|-----|----|----|-----|----------|
| K 111 | 18 | 19 | 1 | 20 | 29 | 5 | 200 | C |
| K 112 | 21 | 22 | 1 | 23 | 32 | 7 | 320 | C |
| K 121 | 22¾ | 24¾ | 1 | 25¾ | 36 | 8½ | 360 | C |
| K 122 | 22¾ | 24¾ | 1 | 25¾ | 36 | 8½ | 400 | C |
| K 127 | 23 | 24¾ | 1 | 26 | 33 | 8½ | 300 | C |
| K 128 | 23 | 24¾ | 1 | 26 | 33 | 8½ | 350 | C |

Furnished with Machined Bearing Areas if Desired

OHIO STANDARD ROADWAY MANHOLE COVERS



K 114



| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|-----|-----|---|-----|-----|----|-----|----------|
| K 113 | 21½ | 23¾ | 1 | 23 | 38 | 9 | 595 | W |
| K 114 | 21½ | 23¾ | 1 | 23 | 38 | 9 | 500 | C |
| K 120 | 22½ | 23¾ | ¾ | 23¾ | 34 | 7 | 300 | C |
| K 123 | 23 | 23¾ | ¾ | 24½ | 31¼ | 4½ | 150 | D |
| K 124 | 23 | 23¾ | ¾ | 24½ | 31¼ | 4½ | 200 | C |
| K 125 | 23 | 23¾ | 1 | 24½ | 31¼ | 4½ | 240 | C |

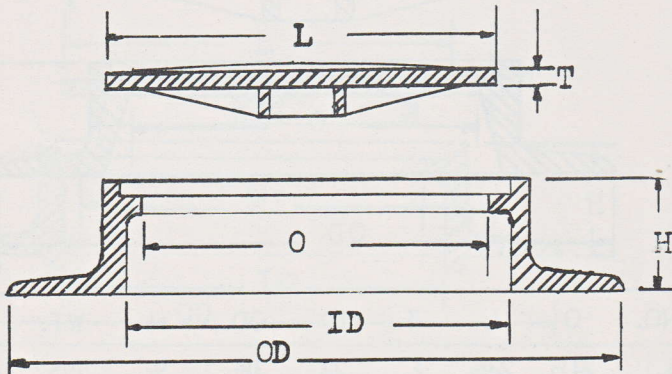
All Castings Asphalt Coated and
Furnished with Machined Bearing Areas If Desired

Quality Gray Iron Castings

HAMILTON COUNTY
HEAVY DUTY MANHOLE COVERS



K 116



| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|-----|-----|---|-----|----|---|-----|----------|
| K 115 | 21½ | 23¾ | 1 | 23¾ | 38 | 7 | 515 | C |
| K 116 | 21½ | 23¾ | 1 | 23¾ | 38 | 7 | 525 | W |

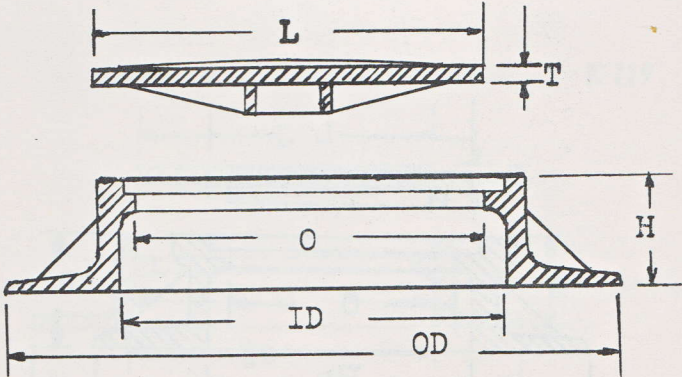
Furnished with Machined Bearing Areas if Desired

Use Cast Iron Manhole Steps

For All Construction

See Pages 5 and 6

HAMILTON COUNTY
HEAVY DUTY VALVE CHAMBER

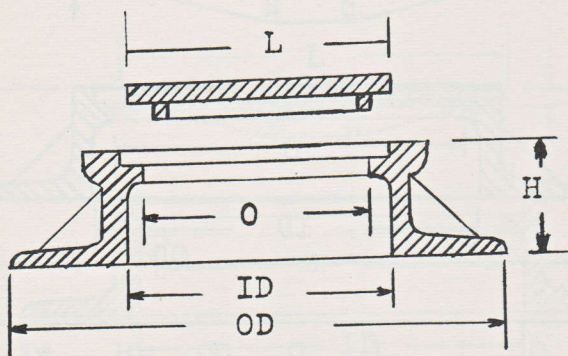
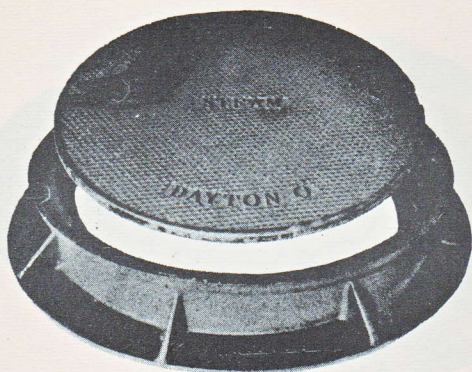


| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|----|-----|----|-----|-----|---|-----|----------|
| K 126 | 23 | 25½ | 1¼ | 25½ | 41½ | 7 | 550 | W |

All Castings Asphalt Coated and
Furnished with Machined Bearing Areas if Desired

Use Cast Iron Manhole Steps
Rust and Corrosive Resistant
See Page 5 and 6

SIDEWALK MANHOLE COVER

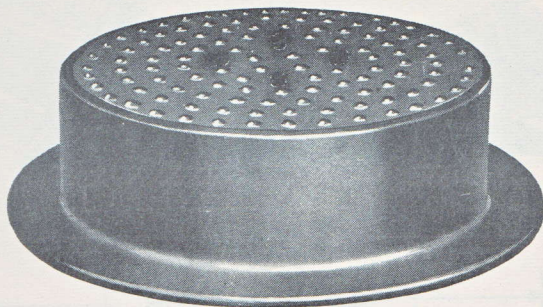


| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|----|----|---|-----|-----|---|-----|----------|
| K 117 | 22 | 24 | ½ | 19½ | 28½ | 5 | 155 | D |

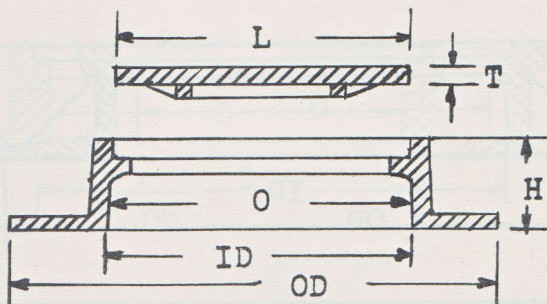
* Can be Furnished with Inside Lid
For Water Proof Cover See Catalog No. K 146

Write for Prices and Information
If You Do Not See It Ask For It

CITY OF SPRINGFIELD
AND BUTLER COUNTY
HEAVY DUTY MANHOLE COVERS



K 119



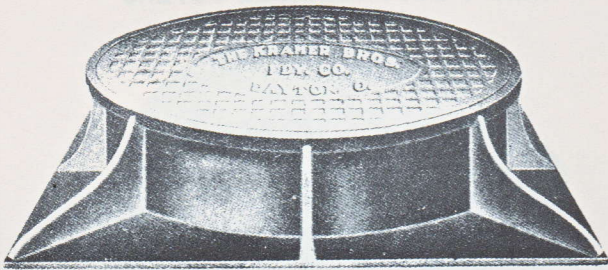
| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|-----|----|---|----|----|----|-----|----------|
| K 118 | 22¼ | 24 | ¾ | 25 | 34 | 8¼ | 380 | D |
| K 119 | 22¼ | 24 | ¾ | 25 | 34 | 8¼ | 345 | K |

All Castings Asphalt Coated and
Furnished with Machined Bearing Areas if Desired

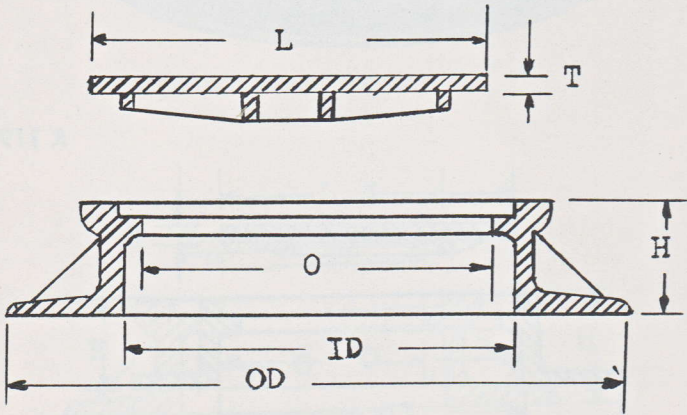
Use Cast Iron Manhole Steps
For All Construction

See Pages 5 and 6

SPECIAL HEAVY DUTY MANHOLE COVERS



K 129

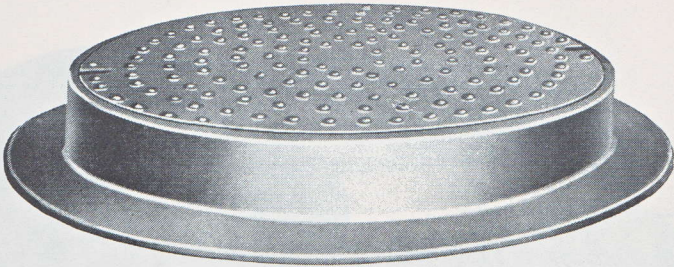


| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|----|----|---|----|---------|-----|------|----------|
| K 129 | 25 | 28 | 1 | 26 | 41 x 49 | 8 | 700 | I* |
| K 130 | 25 | 28 | 1 | 26 | 41 x 49 | 10½ | 900 | I* |
| K 131 | 30 | 37 | 1 | 33 | 48 x 48 | 10 | 1200 | I |
| K 132 | 30 | 38 | 1 | 36 | 50 x 50 | 10 | 1100 | I* |
| K 133 | 31 | 36 | 1 | 31 | 47 x 47 | 8 | 1050 | I* |

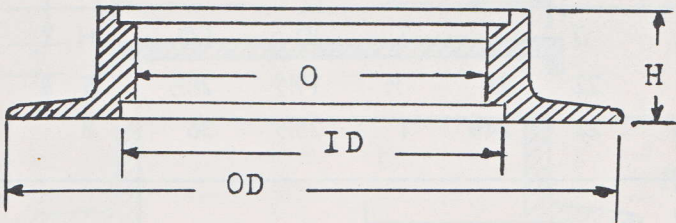
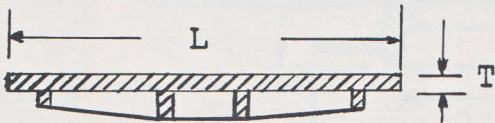
*Can Be Furnished With Inside Frost Proof Lid
And Machined Areas If Desired

Write for Prices and Information

LARGE MANHOLE COVERS



K 134



| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|----|----|----|----|----|---|-----|----------|
| K 134 | 34 | 36 | 1¼ | 36 | 46 | 5 | 500 | Special |
| K 135 | 34 | 36 | 1¼ | 36 | 46 | 5 | 590 | I |

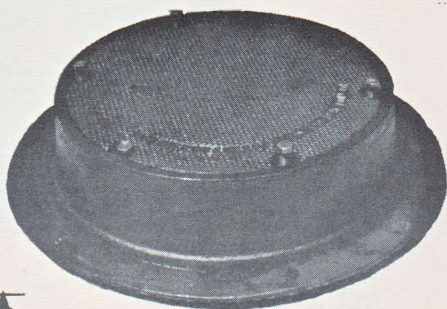
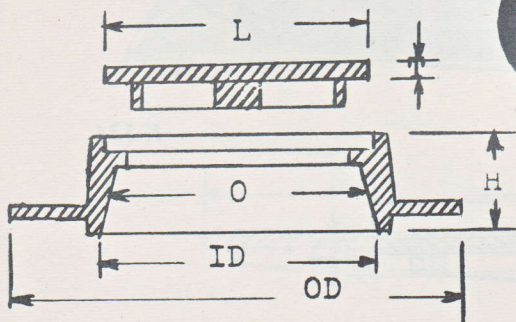
All Castings Asphalt Coated if Desired

Use Cast Iron Manhole Steps

Rust and Corrosive Resistant

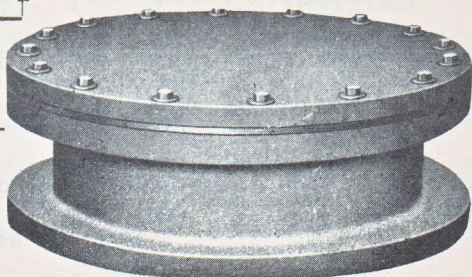
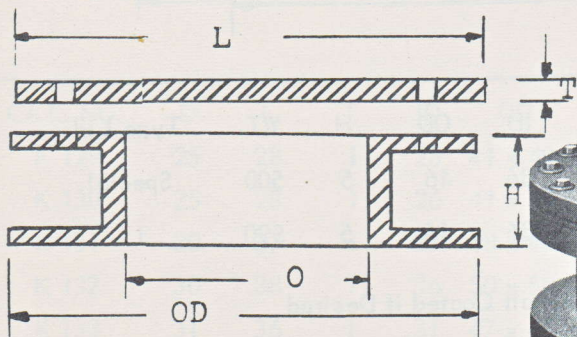
See Pages 5 and 6

CITY OF DAYTON
HEAVY DUTY PRESSURE MANHOLE COVERS



K 147

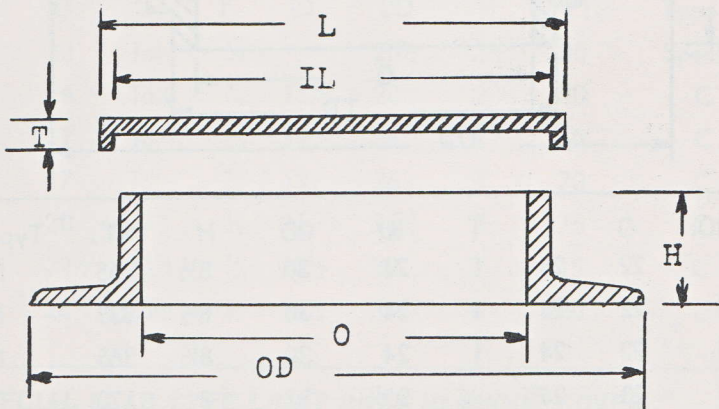
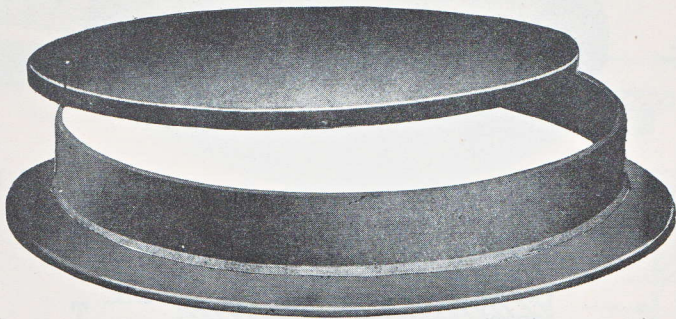
| CAT. NO. | O | L | T | ID | OD | H | WT. |
|----------|----|-----|---|-----|-----|---|-----|
| K 146 | 22 | 24 | ½ | 19½ | 28½ | 5 | 155 |
| K 147 | 22 | 24¾ | 1 | 25½ | 36 | 8 | 400 |



| CAT. NO. | O | L | T | OD | H | WT. |
|----------|----|----|---|----|----|-----|
| K 148 | 24 | 32 | 1 | 32 | 12 | 800 |

Quality Gray Iron Castings

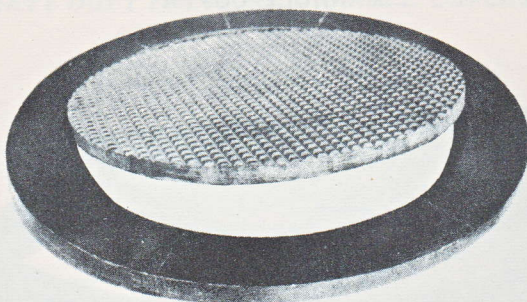
WATER PROOF TANK OR RESERVOIR
MANHOLE COVER



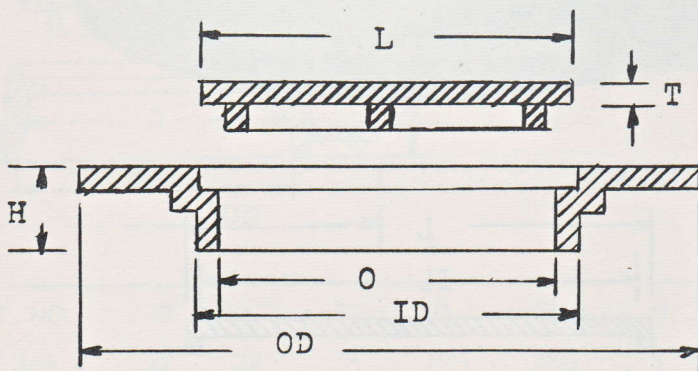
| CAT. NO. | O | L | T | ID | OD | H | WT. |
|----------|----|----|---|----|----|---|-----|
| K 149 | 36 | 40 | 2 | 38 | 46 | 6 | 450 |

All Castings Asphalt Coated if Desired
Use Cast Iron Manhole Steps
For All Construction
See Pages 5 and 6

ROUND SLAB TYPE HEAVY DUTY MANHOLE COVERS

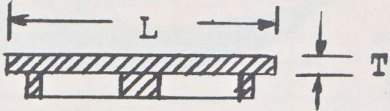
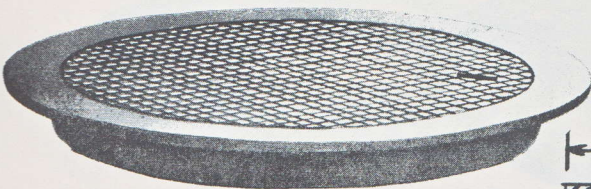


K-164

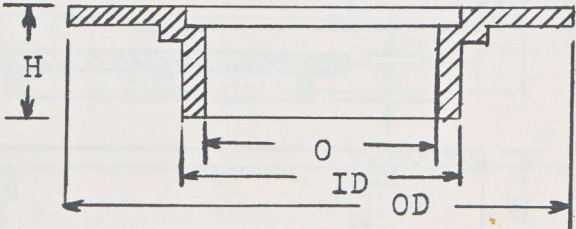


| CAT. NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|----------|----|-----|----|-----|----|----|------|----------|
| K 151 | 22 | 24 | 1 | 24 | 30 | 8½ | 265 | D |
| K 152 | 22 | 24 | 1 | 24 | 30 | 8½ | 335 | K |
| K 153 | 22 | 24 | 1 | 24 | 30 | 8½ | 365 | D |
| K 154 | 23 | 24¾ | ¾ | 25½ | 31 | 3 | 170 | C |
| K 155 | 23 | 24¾ | ¾ | 25½ | 31 | 6 | 215 | C |
| K 156 | 23 | 24¾ | 1 | 25½ | 31 | 3 | 225 | C |
| K 157 | 23 | 24¾ | 1 | 25½ | 31 | 3 | 265 | C |
| K 158 | 23 | 24¾ | 1 | 25½ | 31 | 6 | 270 | C |
| K 159 | 23 | 24¾ | 1 | 25½ | 31 | 6 | 310 | C |
| K 163 | 30 | 31½ | 1 | | 45 | 4 | 450 | D |
| K 164 | 30 | 32 | 1½ | | 42 | 5 | 825 | D |
| K 165 | 34 | 36 | 1¼ | 36 | 46 | 5 | 500 | Special |
| K 166 | 34 | 36 | 1¼ | 36 | 46 | 5 | 590 | I |
| K 167 | 42 | 44 | 1½ | | 54 | 5 | 1350 | D |

ROUND SLAB TYPE LIGHT DUTY MANHOLE COVERS

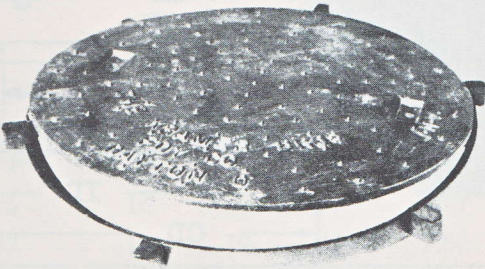


K 180



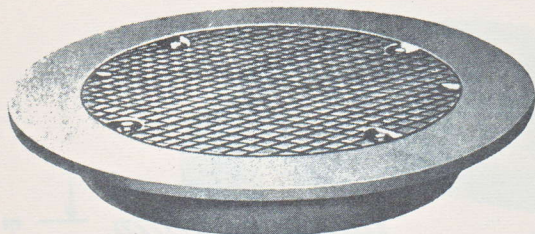
| CAT NO. | O | L | T | ID | OD | H | WT. | Type Lid |
|---------|-----|-----|---|-----|-----|----|-----|----------|
| K 176 | 13 | 14½ | ¼ | | 20½ | 2½ | 30 | Special |
| K 177 | 16 | 16¾ | ½ | 16½ | 20 | 2 | 30 | C |
| K 178 | 17 | 18 | ½ | 19 | 23 | 2 | 60 | C |
| K 179 | 17 | 18 | ½ | 19 | 26 | 3 | 70 | C |
| K 180 | 20 | 21 | ½ | 21 | 26½ | 3 | 75 | C |
| K 181 | 22½ | 23½ | ½ | 23½ | 29 | 3 | 115 | C |
| K 182 | 24 | 25½ | ½ | 25½ | 31 | 6 | 180 | C |

SPECIAL SLAB TYPE LIGHT DUTY MANHOLE COVER

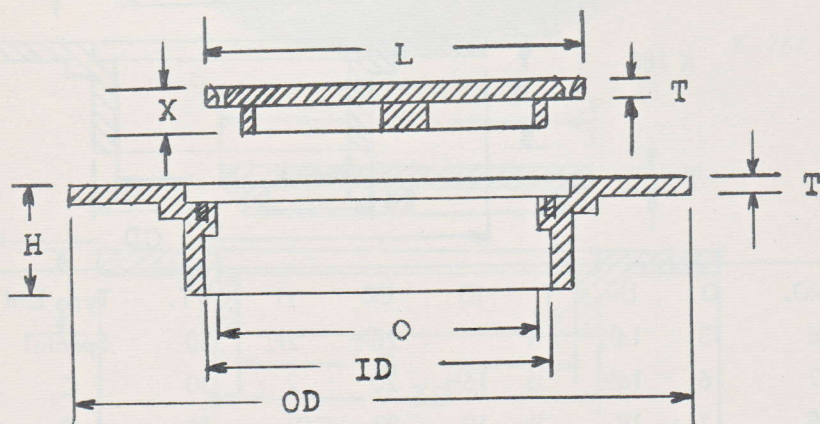


| CAT. NO. | O | L | T | OD | H | WT. |
|----------|----|----|----|----|---|-----|
| K 189 | 34 | 36 | 1¼ | 38 | 3 | 325 |

PRESSURIZED HEAVY DUTY SLAB TYPE MANHOLE COVER

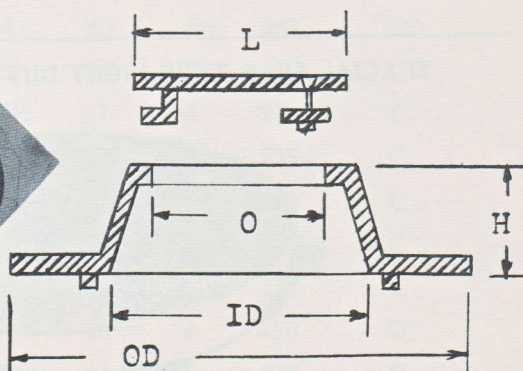
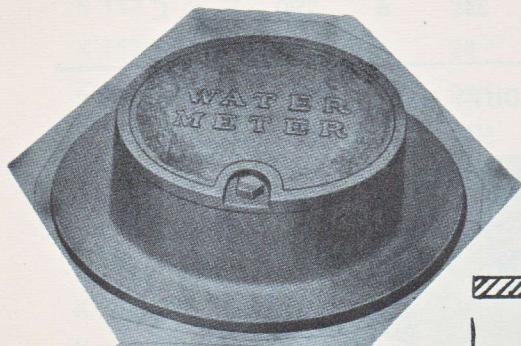


Manhole furnished
with 6 Hex Head $\frac{3}{4}$ "
Brass Bolts and
Pressure Gasket



| Cat. No. | O | L | T | ID | OD | H | X | WT. | Type Lid |
|----------|----|------------------|---|------------------|----|---|-----------------|-----|----------|
| K 190 | 21 | 24 $\frac{3}{4}$ | 1 | 25 $\frac{1}{2}$ | 31 | 3 | 3 $\frac{1}{2}$ | 275 | D |

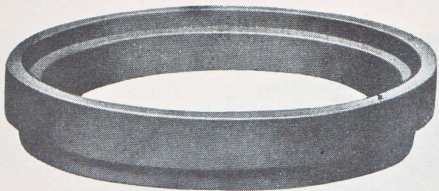
WATER METER BOXES



| Cat. No. | Pipe Size | O | L | T | ID | OD | H | WT. |
|----------|-----------|------------------|------------------|---------------|------------------|----|---|-----|
| K 191 | 12 | 5 $\frac{3}{4}$ | 9 $\frac{3}{4}$ | $\frac{1}{2}$ | 8 | 17 | 3 | 20 |
| K 192 | 20 | 11 $\frac{1}{2}$ | 12 $\frac{1}{2}$ | $\frac{1}{2}$ | 12 $\frac{1}{2}$ | 22 | 4 | 35 |

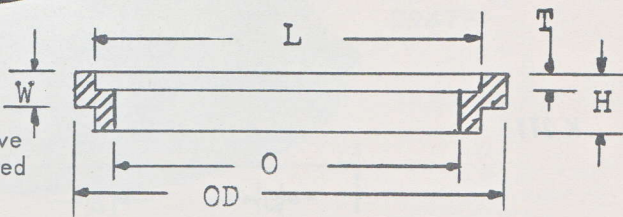
Quality Gray Iron Castings

MANHOLE ADJUSTING RINGS



A low cost method of raising manholes when streets or highways are being resurfaced

For special sizes give specifications required

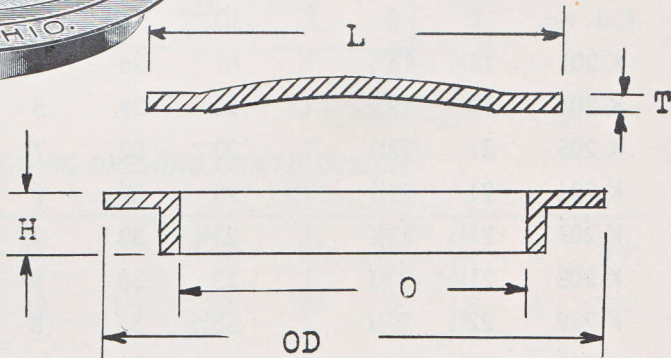


| CAT. NO. | O | L | T | OD | H | W | WT. |
|----------|-----|----|---|-----|----|----|-----|
| K 195-1 | 23½ | 25 | 1 | 26¼ | 2½ | 1½ | 60 |
| K 195-2 | 23½ | 25 | 1 | 26¼ | 3 | 2 | 70 |



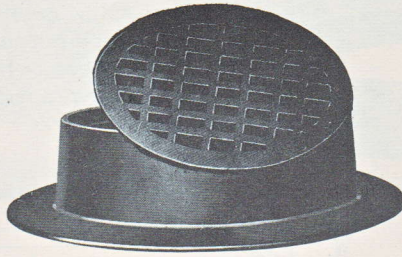
CISTERN COVERS
Oval Top

For a Safe cistern keep it covered

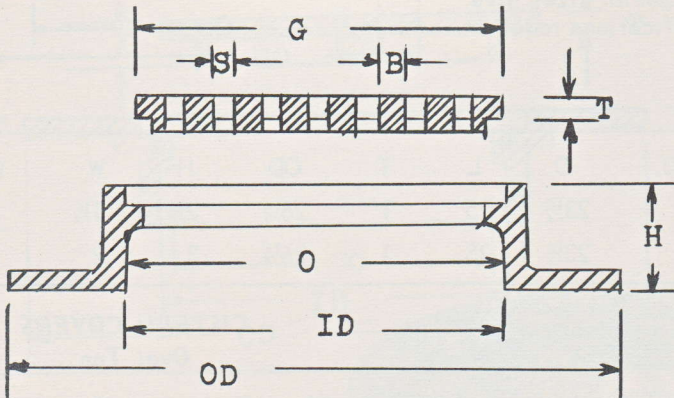


| CAT. NO. | O | L | T | OD | H | WT. |
|----------|----|----|---|-----|----|-----|
| K 196 | 16 | 17 | ½ | 20½ | 1½ | 28 |
| K 197 | 18 | 19 | ½ | 22½ | 2¼ | 34 |
| K 198 | 20 | 21 | ½ | 24½ | 1¾ | 43 |
| K 199 | 23 | 24 | ½ | 29 | 2½ | 73 |

HEAVY DUTY CATCH BASIN COVERS



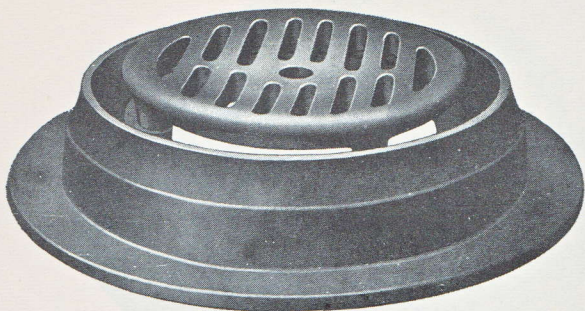
K 211



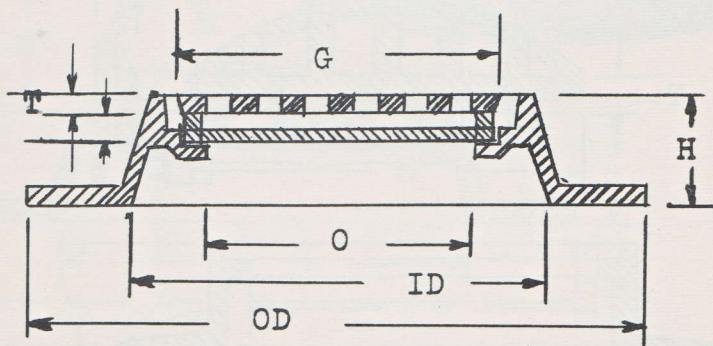
| Cat. No. | O | G | T | ID | OD | H | S | B | WT. | Type Grate |
|----------|-----|-----|----|-----|-----|----|--------|---|-----|---------------|
| K 201 | 14½ | 15½ | ¾ | 18 | 25 | 8 | ½ | ½ | 125 | B |
| K 203 | 18 | 19 | 1 | 20 | 29 | 5 | ¾ | ¾ | 165 | B* |
| K 205 | 21 | 22½ | 1 | 23 | 32 | 7 | 1½ | 1 | 250 | B* |
| K 206 | 21 | 22½ | 1¾ | 23 | 32 | 8 | 1 | 1 | 300 | S |
| K 207 | 21½ | 23¾ | 1 | 23¾ | 38 | 7 | 1¾ | 1 | 485 | C |
| K 208 | 21½ | 23¾ | 1 | 23 | 38 | 9 | 1¾ | 1 | 625 | C |
| K 209 | 22½ | 24¾ | 1 | 25½ | 36 | 8 | 1½ | 1 | 340 | B* |
| K 211 | 22½ | 24¾ | 1 | 25½ | 36 | 8 | 1½ x 2 | 1 | 365 | C |
| K 212 | 22½ | 23¾ | ¾ | 23½ | 34 | 7 | 1¾ | 1 | 415 | C |
| K 213 | 22¾ | 23¾ | 1 | 24½ | 31¼ | 4½ | 1¾ | 1 | 245 | C |
| K 214 | 23¾ | 24¾ | 1 | 26¾ | 33 | 8 | 1½ | 1 | 290 | B* |
| K 215 | 23¾ | 24¾ | 1 | 26¾ | 33 | 8 | 1½ x 2 | 1 | 315 | C |

* Can be furnished with Convex Grate if specified; otherwise Flat Grate will be supplied. Furnished with machined bearing areas if specified

ROUND OAKWOOD CATCH BASIN COVER



CONCAVE
GRATE



NON-CLOGGING OPENING GRATE DESIGN

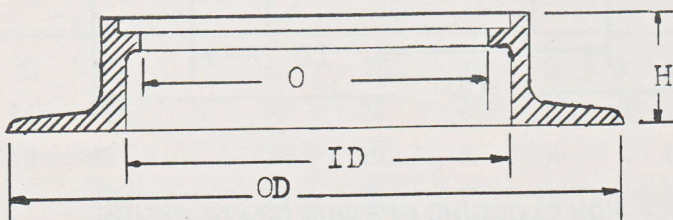
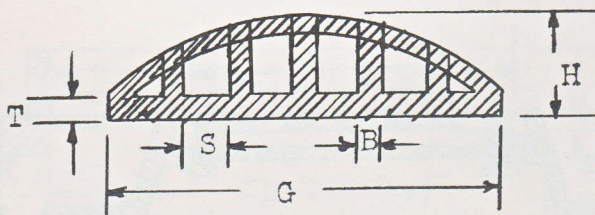
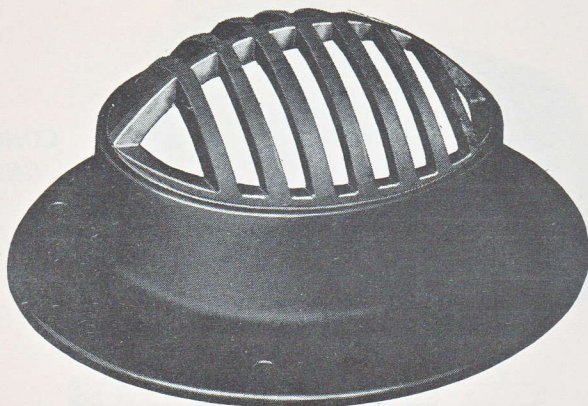
| CAT. NO. | O | G | T | ID | OD | H | S | B | WT. |
|----------|----|----|----|----|----|---|---|---|-----|
| K 235 | 17 | 18 | 1½ | 23 | 29 | 5 | 1 | 1 | 200 |

Will Fit Bell of 24" Tile

Use Cast Iron Manhole Steps
Rust and Corrosive Resistant

See Pages 5 and 6

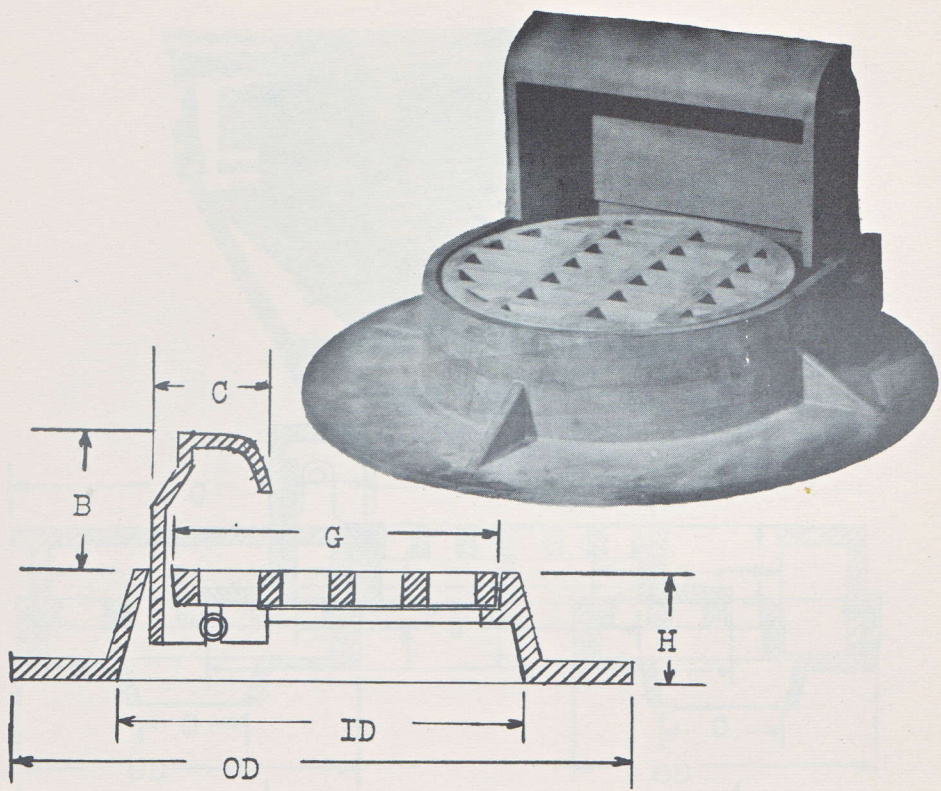
HEAVY DUTY
CROWN TOP CATCH BASIN COVER



| Cat. No. | O | G | T | ID | OD | H | S | B | WT. |
|----------|----|-----|---|----|----|---|---|---|-----|
| K 236 | 21 | 22½ | 1 | 23 | 32 | 7 | 2 | 1 | 255 |

Designed for Roadside and Ditch Drainage
All Castings Asphalt Coated Unless Otherwise Specified
Write for Prices and Information

HEAVY DUTY CATCH BASIN INLET

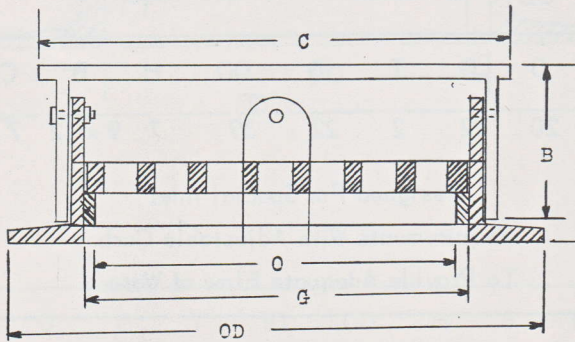
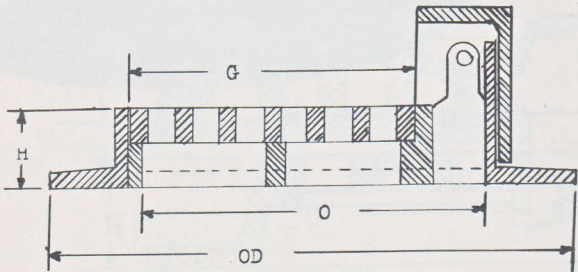
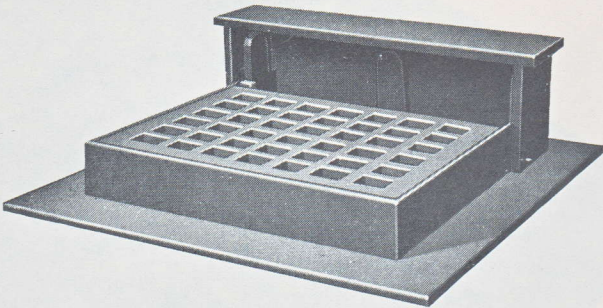


| CAT. NO. | O | G | T | ID | OD | H | B | C | WT. |
|----------|----|----|---|----|----|---|--------|--------|-----|
| K 241 | 20 | 22 | 2 | 22 | 39 | 7 | 9 x 12 | 7 x 21 | 450 |

Designed For Special Inlet
Requirements With Adjustable Curb
To Provide Adequate Flow of Water

Use Cast Iron Manhole Steps
For All Construction
See Pages 5 and 6

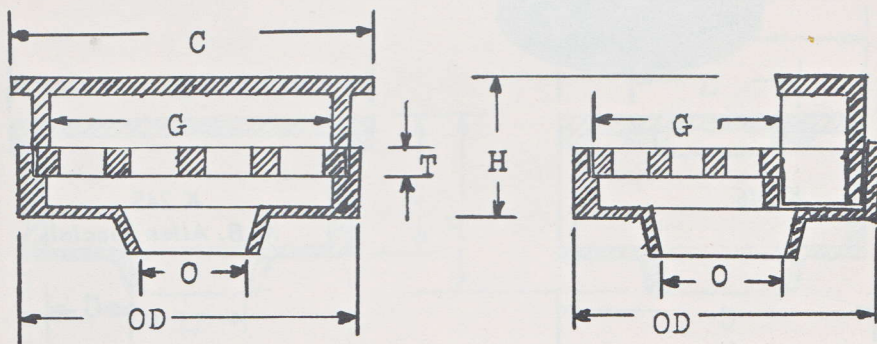
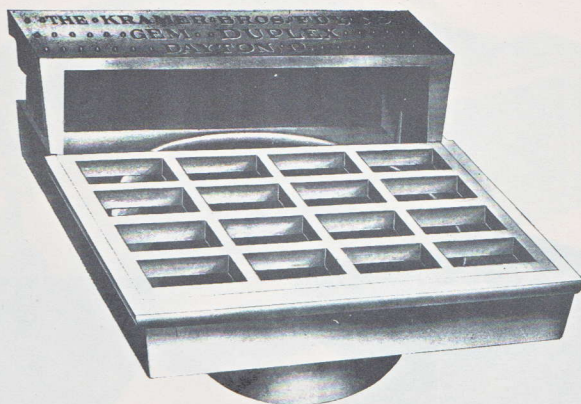
CITY OF SPRINGFIELD
HEAVY DUTY CATCH BASIN INLET



| Cat. No. | O | G | T | ID | OD | H | B | C | WT. |
|----------|---------|---------|---|---------|---------|---|---------|-----|-----|
| K 242 | 22 x 23 | 18 x 24 | 2 | 24 x 24 | 33 x 34 | 5 | 9 to 11 | 29½ | 400 |

Designed with Adjustable Curb

GEM DUPLEX CATCH BASIN INLET

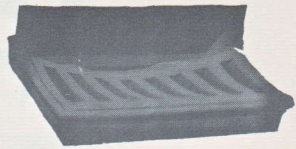
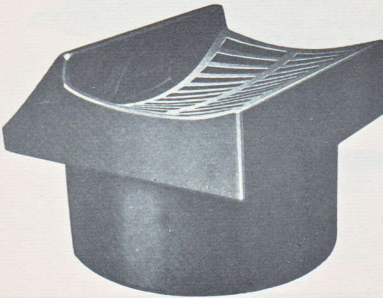


| CAT. NO. | O | G | T | ID | OD | H | C | WT. |
|----------|------|-----------|---|----------|---------|---|----|-----|
| K 243 | 11½* | 11½ x 21½ | 2 | 15 x 21½ | 18 x 23 | 9 | 25 | 155 |
| K 244 | 11½* | 14 x 22 | 2 | 19 x 22 | 20 x 23 | 9 | 25 | 175 |

*Designed to Fit Bell of 10 and 12 inch Sewer Pipe
To Provide Drainage Where a Regular
Catch Basin Can Not Be Constructed

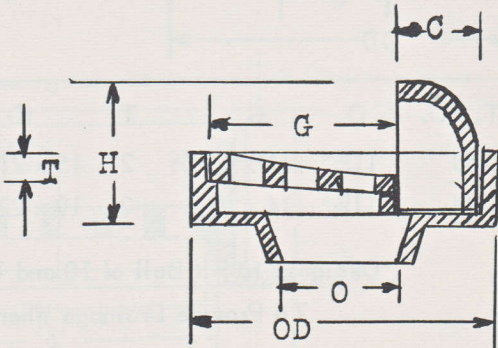
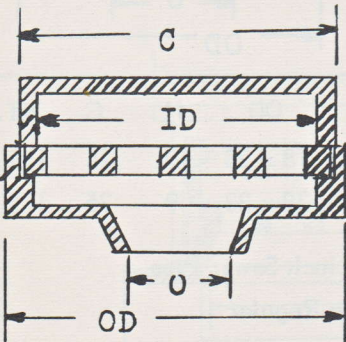
We are Constantly Adding New Designs
To Our Construction Castings. Send
or Bring Your Problems to Us. Let's Talk it Over,
Remember, Construction Castings Are Our Business

HILL SIDE CATCH BASIN INLETS



K 246

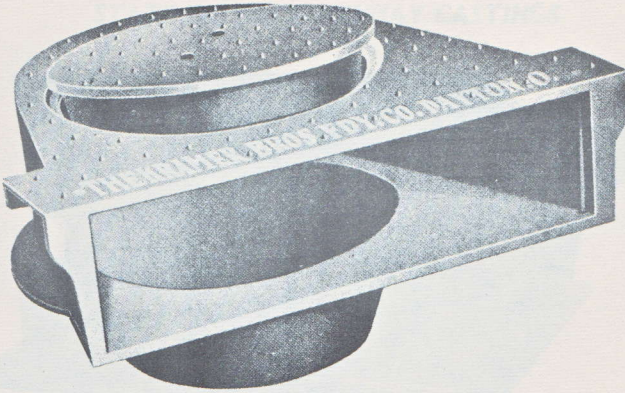
K 245
K. B. Allen Special



| Cat. No. | O | G | T | ID | OD | H | C | WT. |
|----------|------|-----------|----|-----------|----------|----|----|-----|
| K 245 | 11½* | 11½ x 21 | 2 | 15½ x 21 | 17½ x 24 | 7½ | 23 | 140 |
| K 246 | 13½ | 11½ x 16½ | 1¾ | 15½ x 16½ | 17 x 18 | 6 | 18 | 100 |

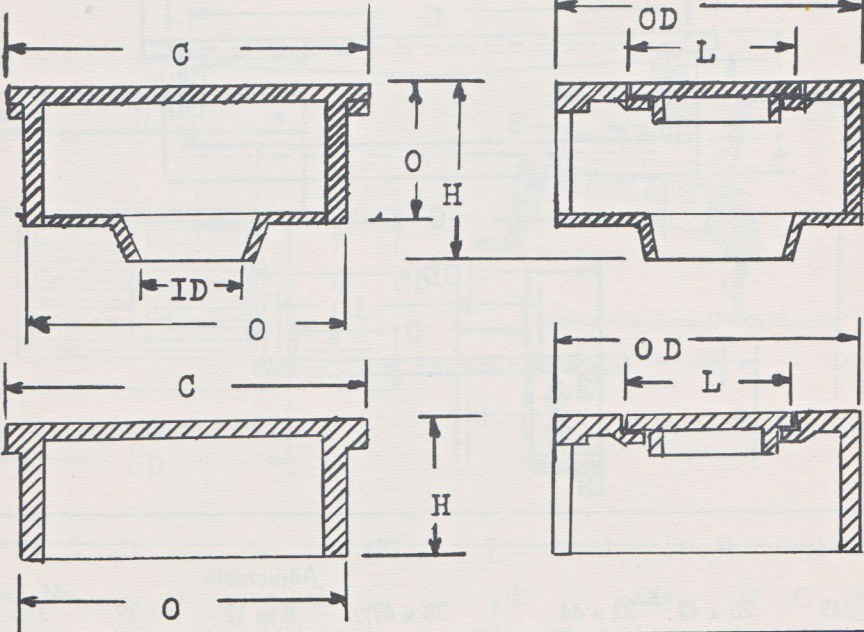
* Designed to Fit Bell of 10 and 12 Inch Sewer Pipe
K 246 for 12 Inch Sewer Pipe Only

GEM 35 CATCH BASIN INLET



FRONT VIEW

SIDE VIEW

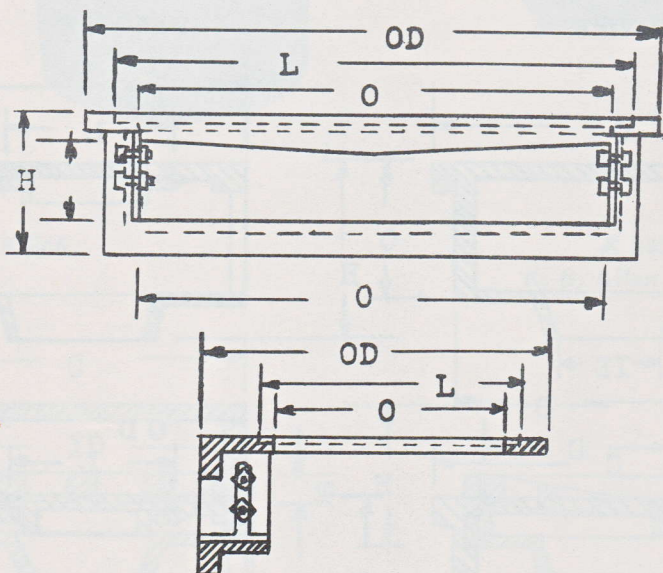
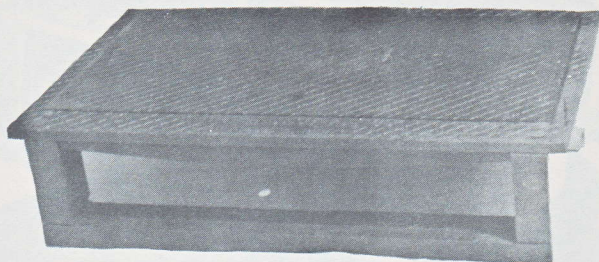


| CAT. NO. | O | L | T | ID | OD | H | C | WT. |
|----------|---------|----|---|----|---------|---|----|-----|
| K 247 | 8 x 24½ | 17 | ½ | 12 | 23 x 26 | 9 | 29 | 180 |
| * K 248 | 8 x 24½ | 17 | ½ | 12 | 23 x 26 | 9 | 29 | 155 |

Designed To Fit Bell of 10 and 12 Inch Sewer Pipe

K 248 Furnished Without Bell or Bell and Bottom Plate as Specified

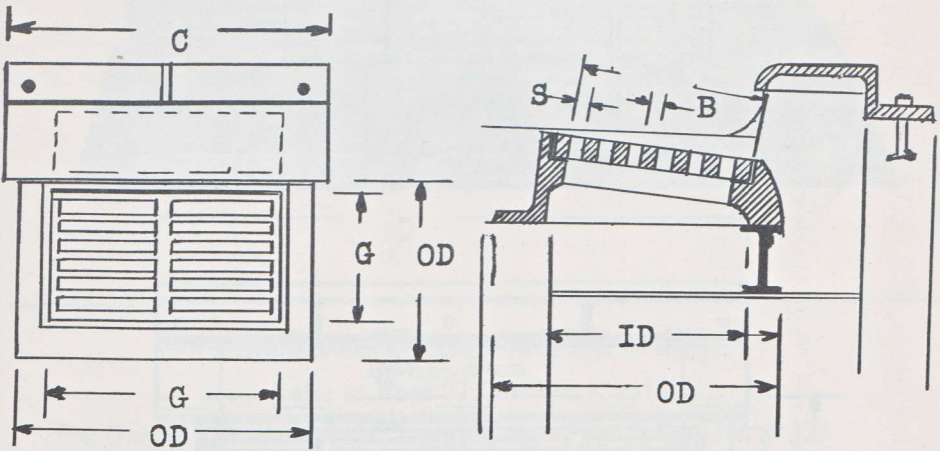
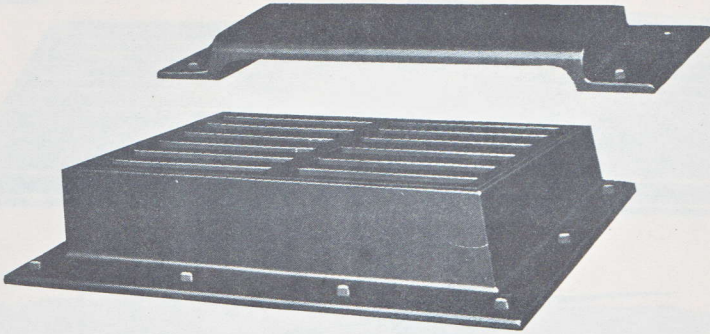
CITY OF DAYTON AND MONTGOMERY COUNTY CATCH BASIN NO. 1



| Cat. No. | O | L | T | OD | H Adjustable | C | WT |
|----------|---------|---------|---|----------|-----------------|----|-----|
| K 249 | 20 x 42 | 22 x 44 | 1 | 28 x 47½ | 8 to 12 | 39 | 325 |

Can be furnished as a combination with rectangular catch basin Cat. No. K 376

NO. 3-A HEAVY DUTY CATCH BASIN INLET
STATE OF OHIO HIGHWAY CASTINGS



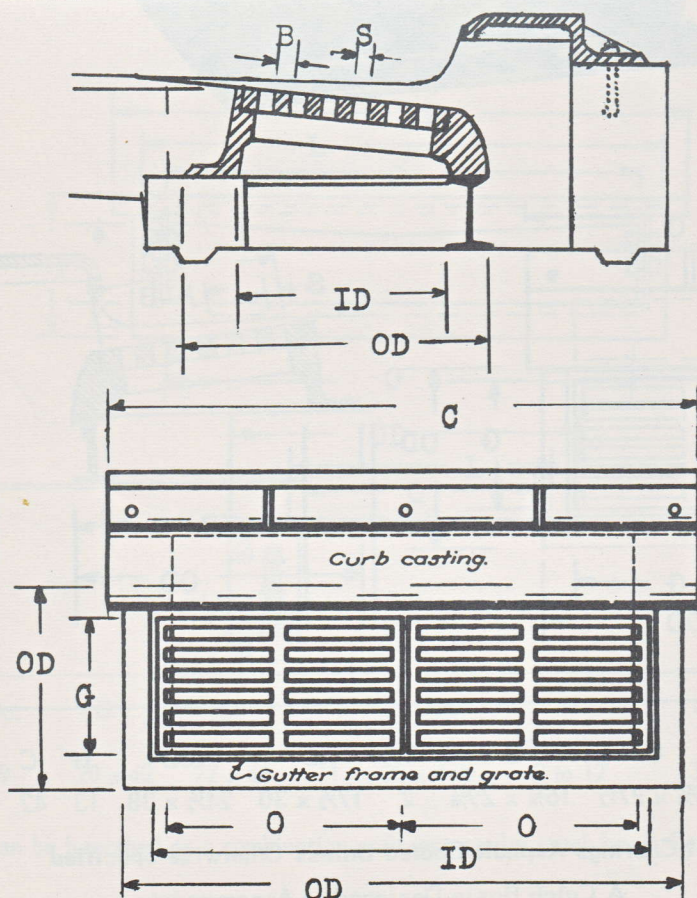
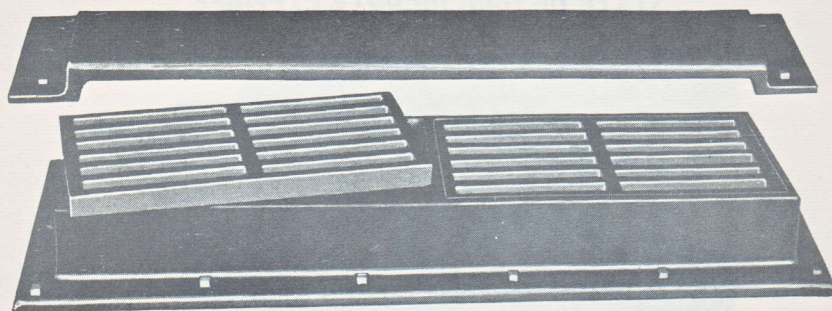
| Cat. No. | O | G | T | ID | OD | H | C | WT. |
|----------|-----------|-----------|---|----------|----------|----|----|-----|
| K 250 | 14¾ x 27½ | 16¾ x 29¾ | 2 | 17½ x 30 | 24½ x 38 | 13 | 42 | 625 |

All Castings Asphalt Coated Unless Otherwise Specified

A Catch Basin Designed to Accommodate
All of Today Highway Traffic and Still
Provide Maximum Drainage Capacity

THE KRAMER BROTHERS FOUNDRY COMPANY – DAYTON 4, OHIO

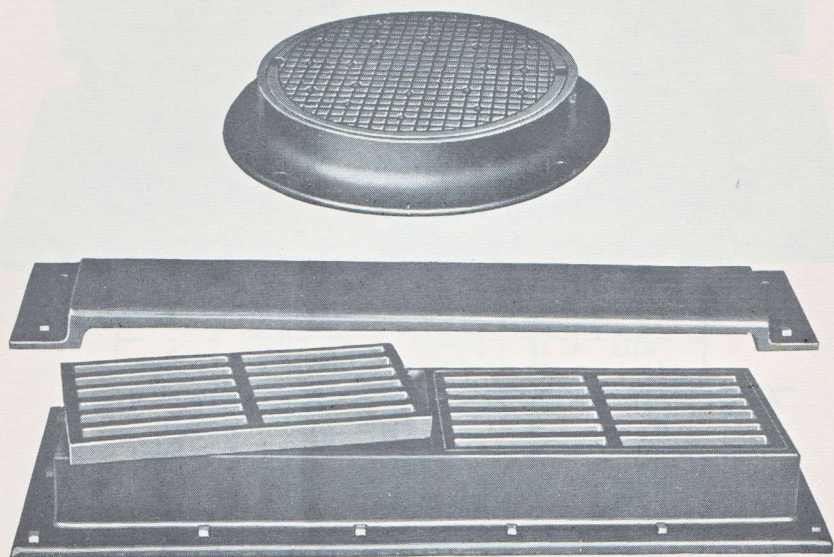
NO. 3 HEAVY DUTY CATCH BASIN INLET
STATE OF OHIO HIGHWAY CASTINGS



| Cat. No. | O | G | T | ID | OD | H | C | WT. |
|----------|-----------|-----------|---|----------|----------|----|----|------|
| K 251 | 14¾ x 58½ | 16¾ x 60½ | 2 | 17½ x 61 | 24½ x 69 | 13 | 73 | 1250 |

Quality Gray Iron Castings

NO. 3 COMBINATION CATCH BASIN INLET
STATE OF OHIO HIGHWAY CASTINGS



For Dimensions of Curb, Frame and Gratings

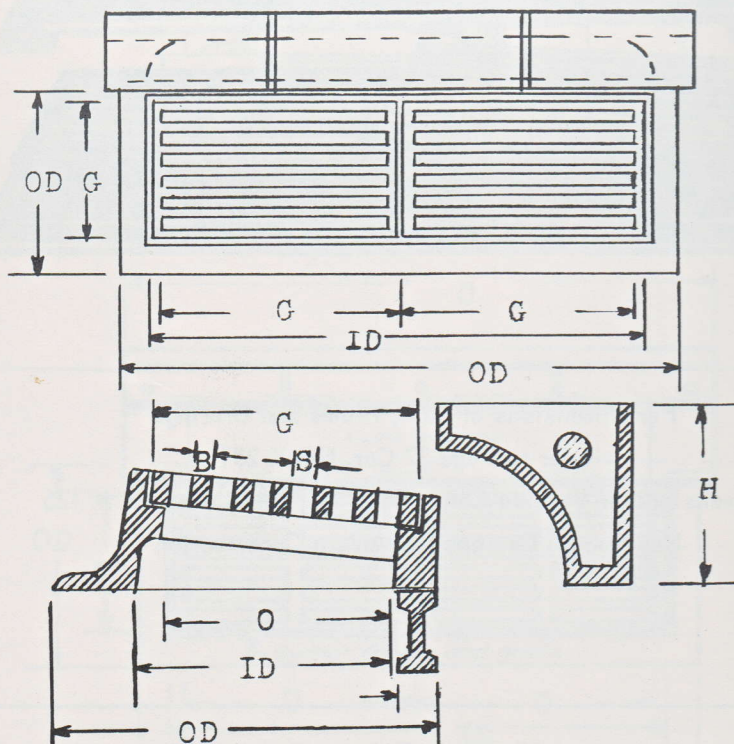
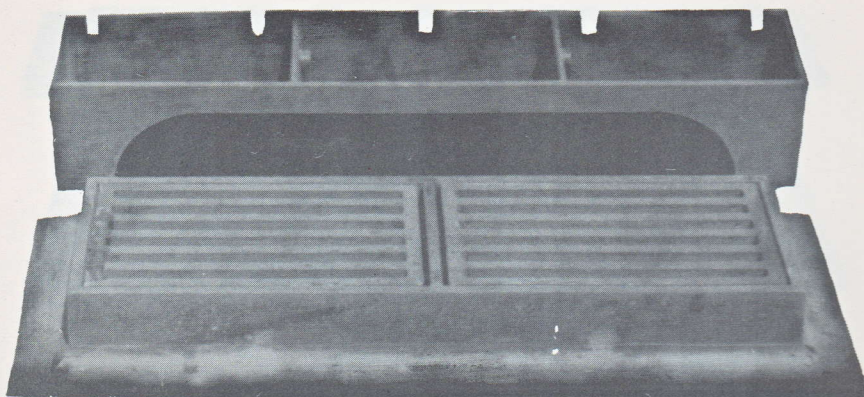
Refer to Page 32 Cat. No. K 251

For Dimensions of Manhole Cover Refer to Page 9 Cat. No. K 125

Use Modern Designs for Modern Construction

| Cat. No. | O | G | T | ID | OD | H | C | WT. |
|----------|-----------|-----------|---|----------|----------|----|----|------|
| K 252 | 14¾ x 58½ | 16¾ x 60½ | 2 | 17½ x 61 | 24½ x 69 | 13 | 73 | 1500 |

CITY OF CINCINNATI AND HAMILTON COUNTY
COMBINATION CATCH BASIN INLET

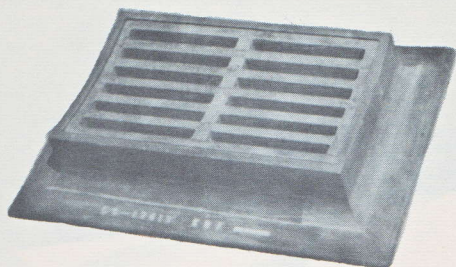


| Cat. No. | O | G | T | ID | OD | H | C | WT |
|----------|---------------------------------------|---------------------------------------|---|-------------------------------------|---------|------------------|------------------|------|
| K 253 | * 14 $\frac{3}{4}$ x 27 $\frac{1}{2}$ | * 16 $\frac{3}{4}$ x 29 $\frac{3}{4}$ | 2 | 14 $\frac{3}{4}$ x 60 $\frac{3}{4}$ | 24 x 73 | 11 $\frac{1}{2}$ | 68 $\frac{3}{4}$ | 1650 |

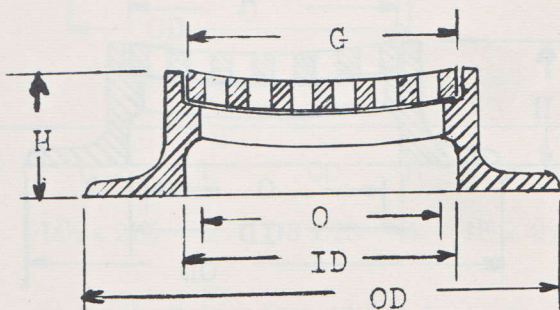
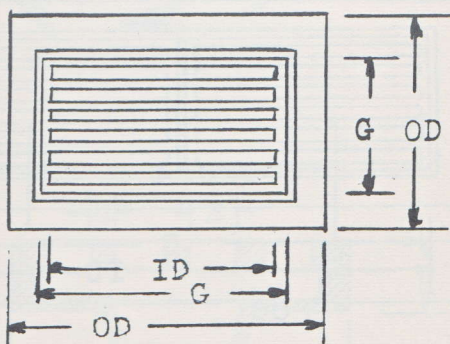
* O is a double opening and * G is a double grate

Quality Gray Iron Castings

*CITY OF CINCINNATI AND HAMILTON COUNTY
SINGLE VALLEY INLET

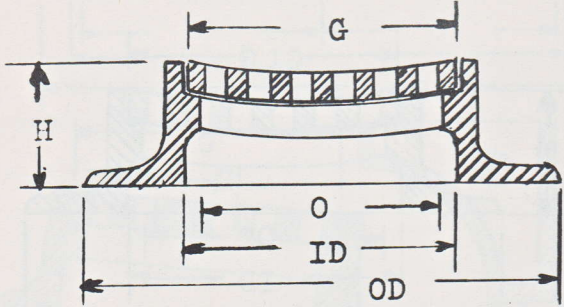
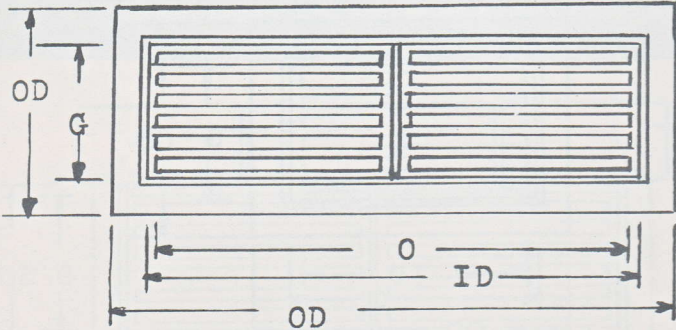
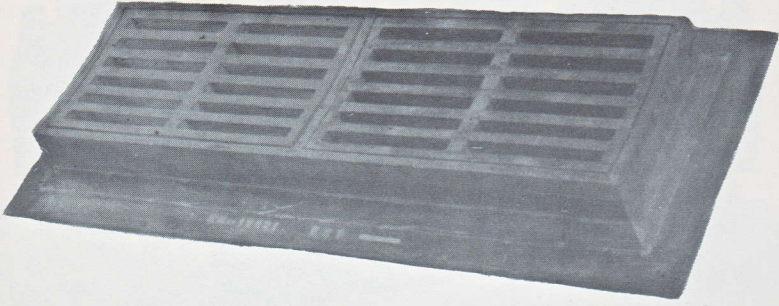


K 256



| Cat. No. | O | G | T | ID | OD | H | WT |
|----------|-------------------------------------|-------------------------------------|---|---------|-------------------------------------|-----------------|-----|
| K 255 | 14 x 15 | 16 $\frac{3}{4}$ x 17 $\frac{3}{4}$ | 2 | 17 x 18 | 28 x 29 | 8 $\frac{1}{2}$ | 410 |
| * K 256 | 14 $\frac{1}{2}$ x 27 $\frac{1}{2}$ | 16 $\frac{3}{4}$ x 29 $\frac{3}{4}$ | 2 | 17 x 30 | 29 $\frac{1}{4}$ x 42 $\frac{1}{4}$ | 7 $\frac{1}{2}$ | 602 |

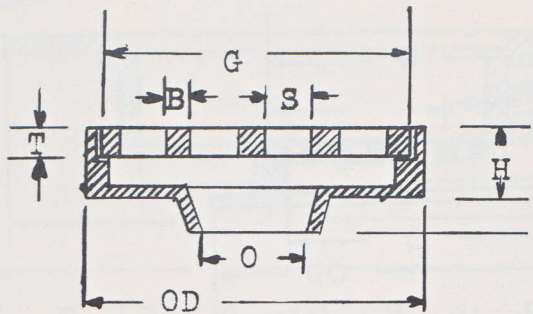
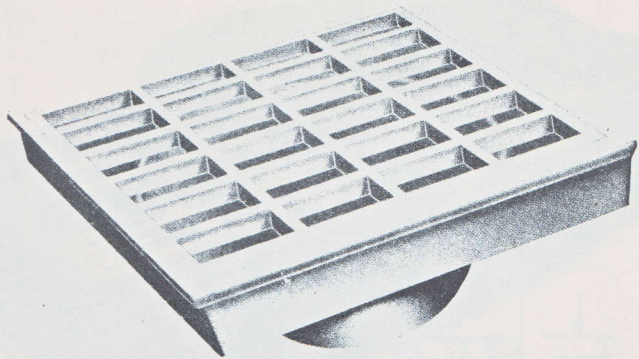
CITY OF CINCINNATI AND HAMILTON COUNTY
DOUBLE VALLEY INLET



| Cat. No. | O | G | T | ID | OD | H | WT |
|----------|------------|------------|---|---------|-----------|----|------|
| K 257 | *14½ x 27½ | *16¾ x 29¾ | 2 | 17 x 61 | 29¼ x 73¼ | 7½ | 1086 |

* O is a double opening and * G is a double grate

GEM DUPLEX CATCH BASIN INLET LESS CURB

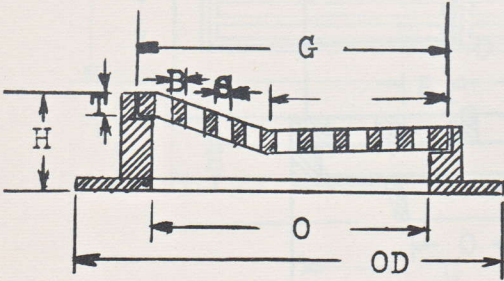
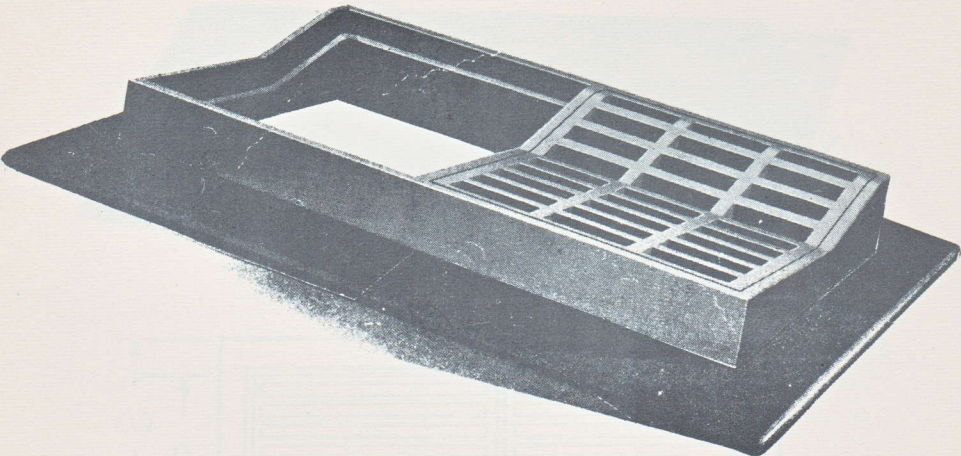


| Cat. No. | O | G | T | OD | H | S | B | WT. |
|----------|----|-----------|---|---------|---|---------|---|-----|
| K 258 | 12 | 16½ x 21½ | 2 | 18 x 23 | 4 | 1½ x 4½ | 1 | 145 |

Designed to Fit the Bell of 10 or 12 Inch Sewer Pipe
Adequate Drainage is Essential to Todays Parking Areas

Write for Prices and Information

SPECIAL CATCH BASIN INLET



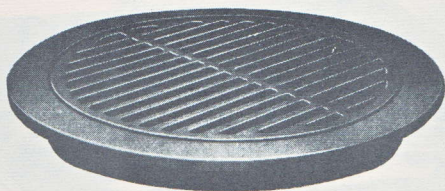
| Cat. No. | O | G | T | ID | OD | H | S | B | WT. |
|----------|-----------|-----------|---|----------|----------|----|----|---|------|
| K 259 | 32¼ x 59¾ | 34½ x 61½ | 2 | 34½ x 62 | 44½ x 70 | 9½ | 1½ | 1 | 1420 |

Furnished in Two Piece Frame Right and Left Hand Sections

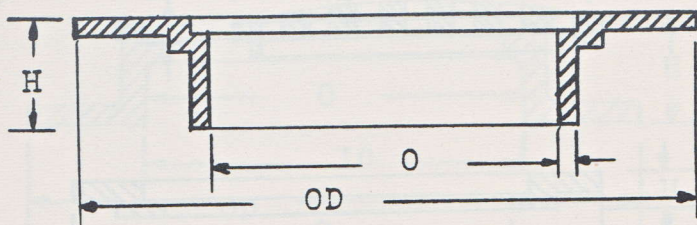
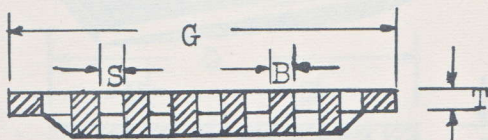
Designed for Rolled Curb Construction to Provide
Maximum Drainage Capacity

Specify the Proper Designed Castings for Todays Requirements
In Modern Road Way Design

ROUND HEAVY DUTY SLAB TYPE GRATE AND FRAME



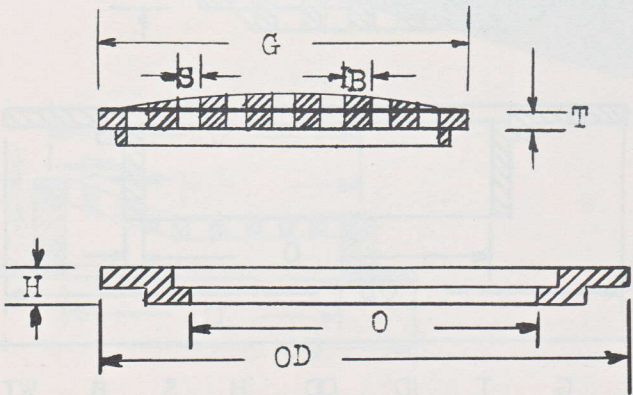
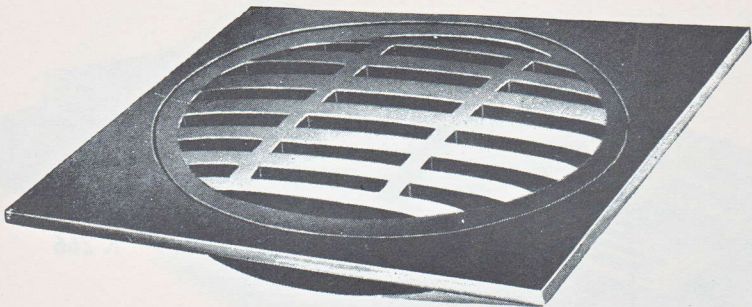
K 266



| Cat. No. | O | G | T | ID | OD | H | S | B | WT. | Type Grate |
|----------|----|-----------------|----------------|-----------------|----|----------------|----------------|---------------|-----|------------|
| K 266 | 17 | 18 | $\frac{1}{2}$ | 19 | 26 | 3 | $\frac{3}{4}$ | $\frac{3}{4}$ | 80 | R |
| K 269 | 22 | 24 | 1 | $25\frac{3}{4}$ | 30 | $8\frac{1}{2}$ | 1 | 1 | 315 | R |
| K 270 | 22 | 24 | 1 | $25\frac{3}{4}$ | 30 | $8\frac{1}{2}$ | 1 | 1 | 350 | C |
| K 271 | 23 | $24\frac{3}{4}$ | 1 | $25\frac{1}{2}$ | 31 | 3 | 1 | 1 | 200 | B* |
| K 272 | 23 | $24\frac{3}{4}$ | 1 | $25\frac{1}{2}$ | 31 | 3 | $1\frac{1}{2}$ | 1 | 230 | C |
| K 273 | 23 | $24\frac{3}{4}$ | 1 | $25\frac{1}{2}$ | 31 | 6 | 1 | 1 | 240 | B* |
| K 274 | 23 | $24\frac{3}{4}$ | 1 | $25\frac{1}{2}$ | 31 | 6 | $1\frac{1}{2}$ | 1 | 270 | C |
| K 275 | 24 | $25\frac{1}{2}$ | $\frac{3}{4}$ | 25 | 31 | 6 | 1 | 1 | 270 | R |
| K 285 | 34 | 36 | $1\frac{1}{4}$ | 38 | 46 | 3 | 1 | 1 | 450 | Special |

*Can be furnished with convex grate if specified otherwise flat grate will be supplied. Furnished with machined bearing areas if specified

ROUND OVAL GRATING WITH SQUARE FRAME



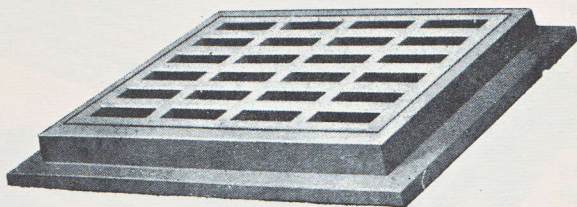
| Cat. No. | O | G | T | OD | H | S | B | WT. |
|----------|-----|-----|---|---------|----|----|---|-----|
| K 299 | 19½ | 20½ | ½ | 24 x 24 | 1½ | 1½ | 1 | 110 |

All Castings Asphalt Coated Unless Otherwise Specified

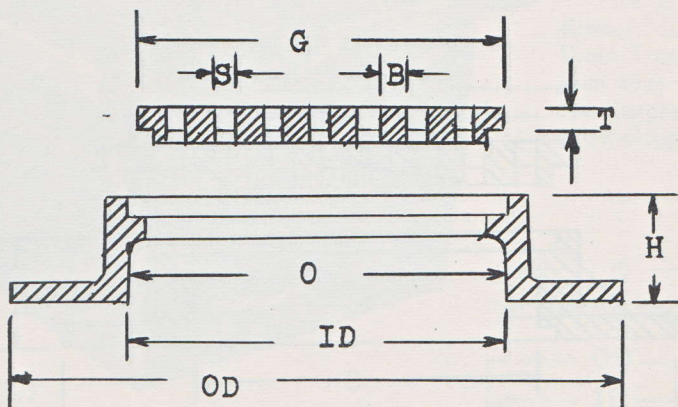
Use Cast Iron Manhole Steps Rust and Corrosive Resistant

See Pages 5 and 6

LIGHT DUTY SQUARE CATCH BASIN



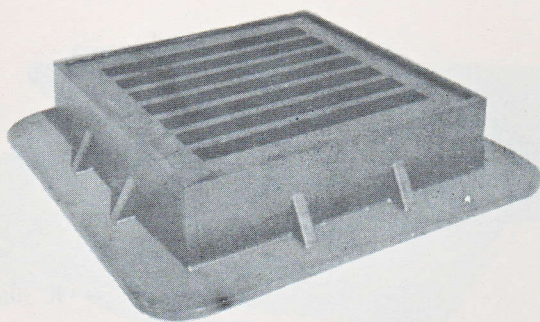
K 306



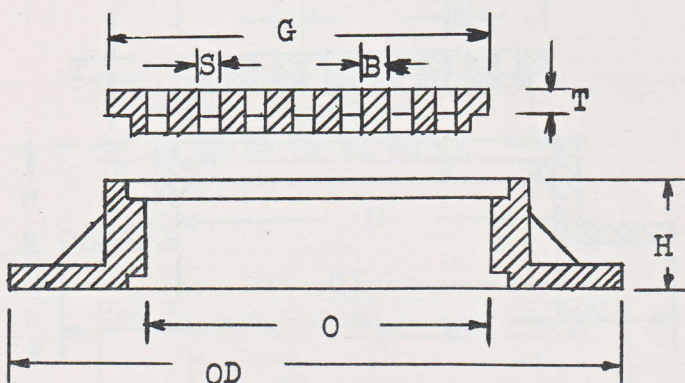
| Cat. No. | O | G | T | ID | OD | H | S | B | WT. |
|----------|-----------|-----------|---|-----------|-----------|---|--------|---|-----|
| K 304 | 10½ x 10½ | 11½ x 11½ | ½ | 11½ x 11½ | 14½ x 14½ | 3 | 1 x 4½ | ¾ | 42 |
| K 305 | 12½ x 12½ | 13½ x 13½ | ½ | 13½ x 13½ | 18 x 18 | 3 | ½ x 3 | ¾ | 50 |
| K 306 | 14½ x 14½ | 15½ x 15½ | ½ | 15½ x 15½ | 18 x 18 | 3 | 1 x 6 | ¾ | 65 |
| K 309 | 16½ x 16½ | 18 x 18 | ½ | 18 x 18 | 21½ x 21½ | 3 | 1 x 7 | ¾ | 85 |
| K 310 | 18½ x 18½ | 20 x 20 | ½ | 20 x 20 | 24 x 24 | 3 | 1 x 8 | ¾ | 110 |
| K 311 | 20½ x 20½ | 22 x 22 | ½ | 22 x 22 | 26 x 26 | 3 | 1 x 6 | ¾ | 125 |
| K 312 | 22½ x 22½ | 24 x 24 | ½ | 24 x 24 | 28 x 28 | 3 | 1 x 6 | ¾ | 150 |
| K 317 | 32 x 32 | 34 x 34 | ½ | 34 x 34 | 40 x 40 | 4 | ¾ x 11 | ¾ | 310 |

All Grates Are (CB) Cross Bar Design

HEAVY DUTY SQUARE CATCH BASIN

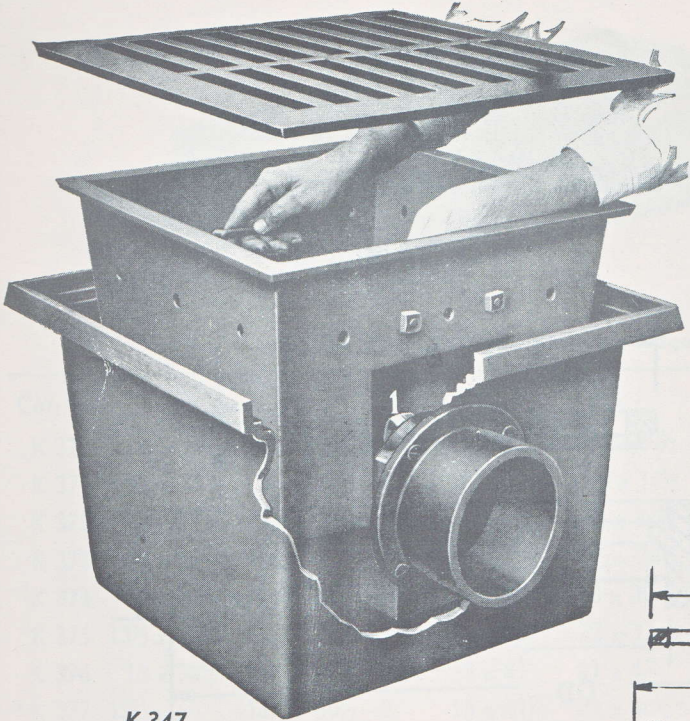


K 333



| Cat. No. | O | G | T | ID | OD | H | S | WT. | Type Grate |
|----------|-----------|---------|---|---------|---------|---|---------|-----|------------|
| K 327 | 11 x 11 | 12 x 12 | ½ | 14 x 14 | 21 x 21 | 8 | 1 x 4½ | 125 | CB |
| K 329 | 17 x 17 | 18 x 18 | ½ | 20 x 20 | 28 x 28 | 5 | 1 x 4 | 215 | CB |
| K 330 | 18½ x 18½ | 20 x 20 | ½ | 20 x 20 | 24 x 24 | 3 | 1 x 5 | 135 | CB |
| K 331 | 20½ x 20½ | 22 x 22 | ½ | 22 x 22 | 26 x 26 | 3 | 1 x 5½ | 160 | CB |
| K 332 | 22½ x 22½ | 24 x 24 | ½ | 24 x 24 | 28 x 28 | 3 | 1 x 6 | 190 | CB |
| K 333 | 22 x 22 | 24 x 24 | 1 | 24 x 24 | 34 x 34 | 7 | 2 x 9½ | 400 | CR |
| K 334 | 22 x 22 | 24 x 24 | 2 | 24 x 24 | 34 x 34 | 7 | 1¾ x 2¼ | 480 | CB |
| K 335 | 26 x 26 | 28 x 28 | 1 | 30 x 30 | 36 x 36 | 6 | 2 x 23 | 390 | CR |

"CLEAN EASY" DRAIN TRAP

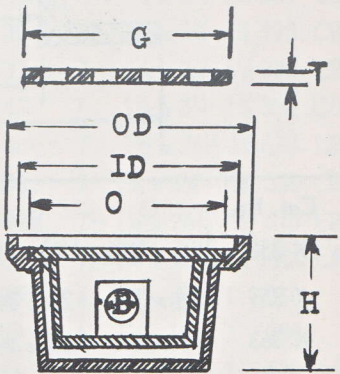


K 347

K 346 and K 349 are made without the inner box arrangement

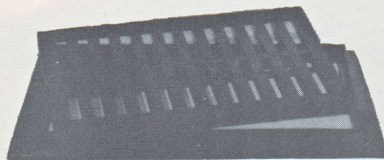
A practical and effective drain trap for use in garages, stables, breweries, hospitals, laundries, and all other places where soil, heavy grease, or other solids present the possibility of clogging the drains or waste pipes.

The use of the Kramer "Clean Easy" Drain Trap will more than save its cost in the charges for cleaning a clogged drain.

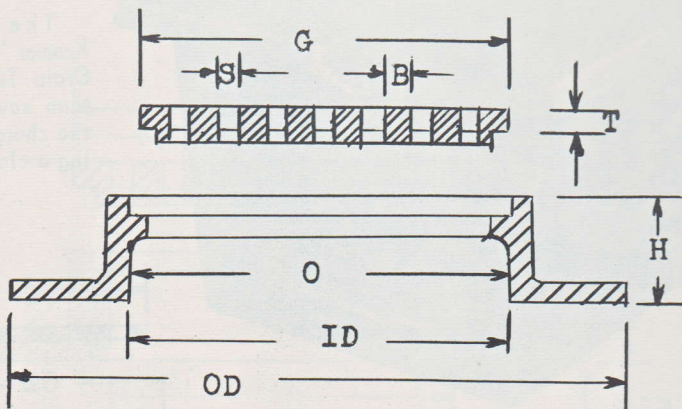


| Cat. No. | G | T | ID | OD | H | B | WT |
|----------|-----------|---|---------|-----------|-----|---|-----|
| K 346 | 6½ x 6½ | ½ | | 8 x 8 | 7 | 2 | 23 |
| K 347 | 11½ x 11½ | ½ | 11 x 11 | 12½ x 12½ | 9 | 3 | 74 |
| K 348 | 18 x 18 | ½ | 17 x 17 | 19½ x 19½ | 12½ | 3 | 180 |
| K 349 | 21¾ x 21¾ | ½ | | 24¾ x 24¾ | 24 | 3 | 240 |

LIGHT DUTY RECTANGULAR CATCH BASIN



K 358



| Cat. No. | O | G | T | ID | OD | H | S | B | WT. | Type Grate |
|----------|-----------|----------|---|---------|---------|---|--------|----|-----|---------------|
| K 358 | 18½ x 30½ | 19½ x 31 | ¾ | 19 x 31 | 24 x 36 | 3 | 1 x 7½ | 1¼ | 215 | CB |
| K 359 | 22½ x 34½ | 24 x 36 | ¾ | 24 x 36 | 30 x 42 | 4 | 1 x 6½ | ¾ | 340 | CB |
| K 363 | 35 x 47 | 36 x 48 | ¾ | 36 x 48 | 42 x 54 | 4 | 1 x 6½ | ¾ | 500 | CB |

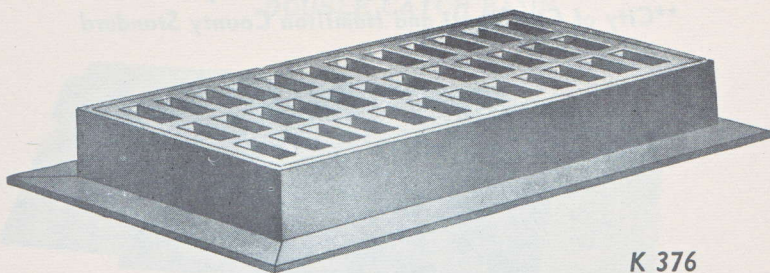
All Castings Asphalt Coated If Specified

Use Cast Iron Manhole Steps

In All Catch Basin Construction

For Types of Design See Pages 5 and 6

HEAVY DUTY RECTANGULAR CATCH BASIN



K 376

For Cross Cut View Refer to View on Page 44

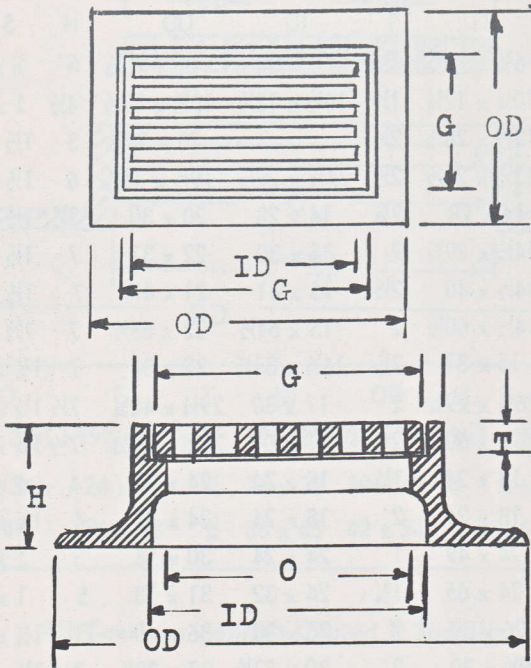
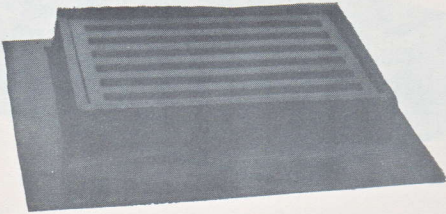
| Cat. No. | O | G | T | ID | OD | H | S | B | WT | Type Grate |
|----------|-----------|-----------|----|-----------|-----------|----|----------|----|------|------------|
| K 370 | 6 x 12½ | 6¾ x 13½ | 2 | 7½ x 14 | 14½ x 20½ | 6 | ¾ x 5¾ | ½ | 85 | CB |
| K 371 | 9¼ x 11¼ | 10¼ x 12¼ | 1½ | 10½ x 12½ | 15½ x 17½ | 4½ | 1 x 8 | ¾ | 100 | CR |
| K 372 | 12 x 27 | 13½ x 28½ | 2½ | | 20 x 34½ | 3 | 1½ x 3¼ | 1¼ | 210 | CB |
| K 373 | 12 x 27 | 13½ x 28½ | 2½ | 14½ x 29½ | 19½ x 34½ | 6 | 1½ x 3¼ | 1¼ | 280 | CB |
| K 374 | 13 x 27 | 14 x 28 | 2¼ | 14 x 28 | 20 x 30 | 3½ | 1½ x 3¾ | ¾ | 190 | CB |
| K 375 | 13½ x 28½ | 14½ x 29½ | 2 | 15 x 30 | 22 x 37 | 7 | 1½ x 26½ | 1¼ | 330 | LR |
| K 376 | 13 x 38½ | 14½ x 40 | 2½ | 15 x 41 | 21 x 47 | 7 | 1½ x 3¼ | 1¼ | 350 | CB |
| * K 377 | 13½ x 60 | 14½ x 60½ | 2 | 15 x 61½ | 22 x 68½ | 7 | 1½ x 26½ | 1¼ | 620 | LR |
| K 378 | 13½ x 29 | 15 x 31 | 2½ | 16½ x 31½ | 22 x 38 | 7 | 1¾ x 3¾ | 1¼ | 350 | CB |
| K 379 | 14½ x 27½ | 16¾ x 29¾ | 2 | 17 x 30 | 29¼ x 42¼ | 7½ | 1¼ x 26¾ | 1¼ | 610 | LR |
| * K 380 | 14½ x 58¾ | 16¾ x 60½ | 2 | 17 x 61 | 29¼ x 73¼ | 7½ | 1¼ x 26¾ | 1¼ | 1100 | LR |
| K 381 | 16½ x 22½ | 18 x 24 | 1¼ | 18 x 24 | 24 x 30 | 4 | 1 x 4½ | 1 | 260 | |
| K 382 | 16½ x 22½ | 18 x 24 | 2 | 18 x 24 | 24 x 30 | 4 | 1¾ x 2¼ | 1 | 300 | |
| * K 383 | 22½ x 22½ | 24 x 49 | 1 | 24 x 24 | 30 x 56 | 3 | 2 x 19½ | 1 | 470 | LR |
| * K 384 | 22½ x 30½ | 24 x 65 | 1¾ | 24 x 32 | 31 x 73 | 5 | 1 x 3¾ | 1 | 1100 | |
| K 385 | 24 x 28 | 26 x 30 | 2 | 26 x 30 | 36 x 40 | 11 | 1¾ x 2¼ | 1¼ | 785 | |
| * K 386 | 28½ x 28½ | 29½ x 30 | 2 | 30 x 31½ | 37 x 38½ | 7 | 1½ x 26½ | 1¼ | 600 | LR |
| * K 387 | 28 x 29 | 30 x 31 | 2½ | 30 x 32 | 37 x 39 | 7 | 1¾ x 3¾ | 1¼ | 630 | |
| * K 388 | 27 x 38½ | 30 x 40 | 2½ | 31 x 41 | 37 x 47 | 7 | 1½ x 3¼ | 1¼ | 690 | |

* Made with double openings and double grates

HEAVY DUTY SINGLE CATCH BASIN

*City of Dayton and Montgomery County Standard

**City of Cincinnati and Hamilton County Standard

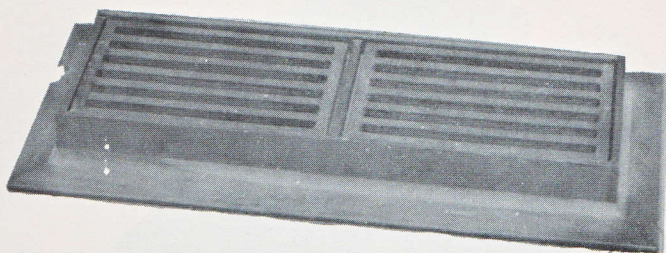


| Cat. No. | O | G | T | ID | OD | H | S | B | WT | Type Grate |
|----------|-----------|-----------|---|---------|-----------|----|----------|----|-----|------------|
| *K 375 | 13½ x 28½ | 14½ x 29½ | 2 | 15 x 30 | 22 x 37 | 7 | 1½ x 26½ | 1¼ | 330 | LR |
| **K 379 | 14½ x 27½ | 16¾ x 29¾ | 2 | 17 x 30 | 29¼ x 42¼ | 7½ | 1¼ x 26¾ | 1¼ | 610 | LR |

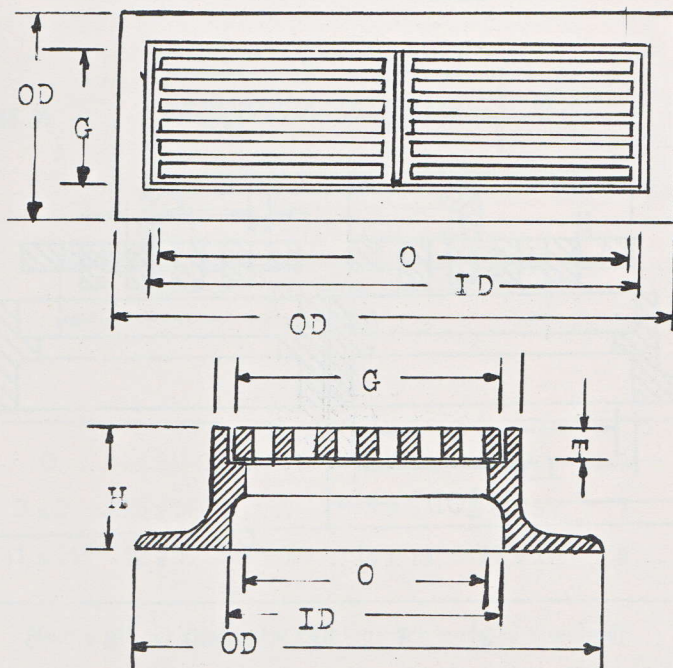
All Castings Asphalt Coated If Specified

Write for Prices and Information

*CITY OF DAYTON
 **CITY OF CINCINNATI AND HAMILTON COUNTY
 DOUBLE CATCH BASIN



K 380



| Cat. No. | O | G | T | ID | OD | H | S | B | WT |
|----------|-----------|-----------|---|----------|-----------|----|----------|----|------|
| * K 377 | 13½ x 28 | 14½ x 29½ | 2 | 15 x 61½ | 22 x 68½ | 7 | 1½ x 26½ | 1¼ | 620 |
| **K 380 | 14½ x 27½ | 16¾ x 29¾ | 2 | 17 x 61 | 29¼ x 73¼ | 7½ | 1½ x 26¾ | 1¼ | 1100 |

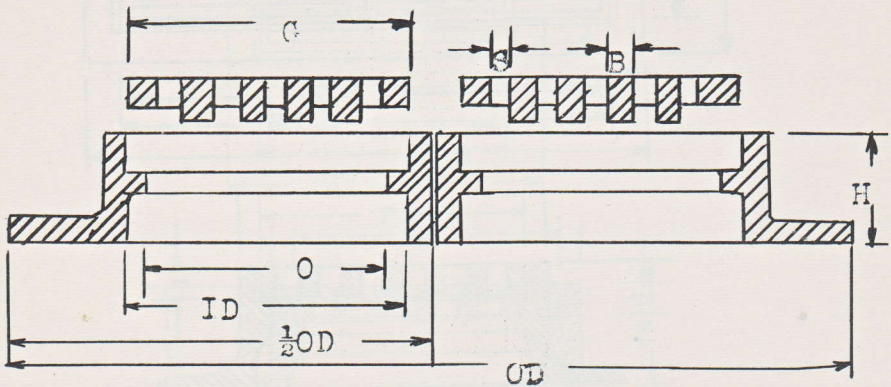
* Frame furnished in two section and set end to end

Both of the above designs have double openings and double grates

HEAVY DUTY DOUBLE CATCH BASIN
 City of Dayton and Montgomery County Standard
 (Side by Side)



K 386

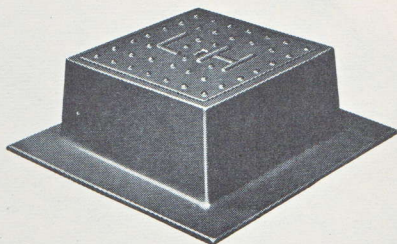


| Cat. No. | O | G | T | ID | OD | H | S | B | WT | Type Grate |
|----------|-----------|----------|----|----------|----------|---|----------|----|-----|------------|
| K 386 | 28½ x 28½ | 29½ x 30 | 2 | 30 x 31½ | 37 x 38½ | 7 | 1½ x 26½ | 1¼ | 600 | LR |
| K 387 | 28 x 29 | 30 x 31 | 2½ | 30 x 32 | 37 x 39 | 7 | 1¼ x 3¾ | 1¼ | 630 | CB |
| K 388 | 27 x 38½ | 30 x 40 | 2½ | 31 x 41 | 37 x 47 | 7 | 1½ x 3¾ | 1¼ | 690 | CB |

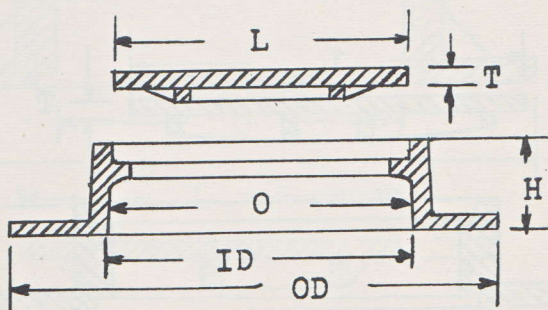
Use Cast Iron Manhole Steps in All Catch Basin Construction

For Types of Design See Pages 5 and 6

SQUARE LAMP HOLE COVER AND MONUMENT BOX



K 412

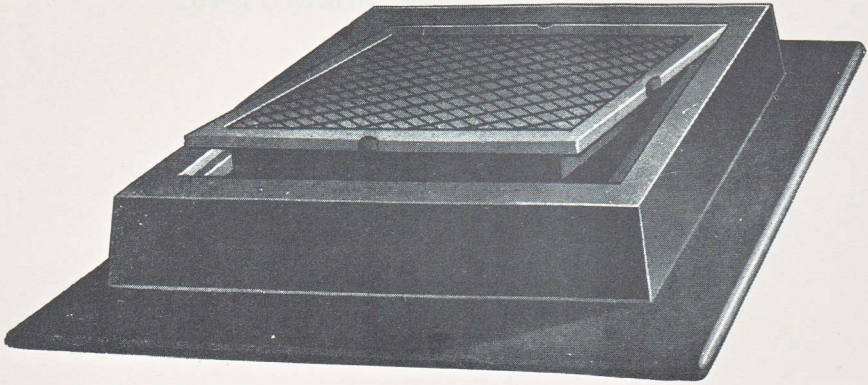


| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|---------|---------|---|---------|---------|---|-----|
| K 404 | 3 x 3 | 3½ x 3½ | ½ | 3 x 3 | 6 x 6 | 7 | 20 |
| K 412 | 11 x 11 | 12 x 12 | ¾ | 14 x 14 | 21 x 21 | 8 | 125 |

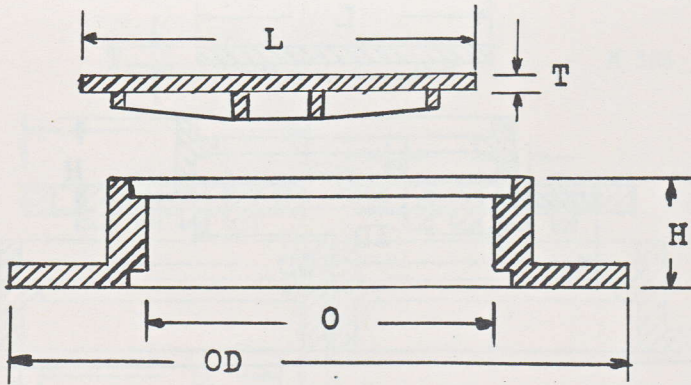
Nearly all our contractor castings are made to standard design specification. However modern construction calls for modern designs and we are anxious to supply your demands.

Consult us for all Prices and Information Pertaining to your Castings needs

HEAVY DUTY SQUARE MANHOLE COVERS

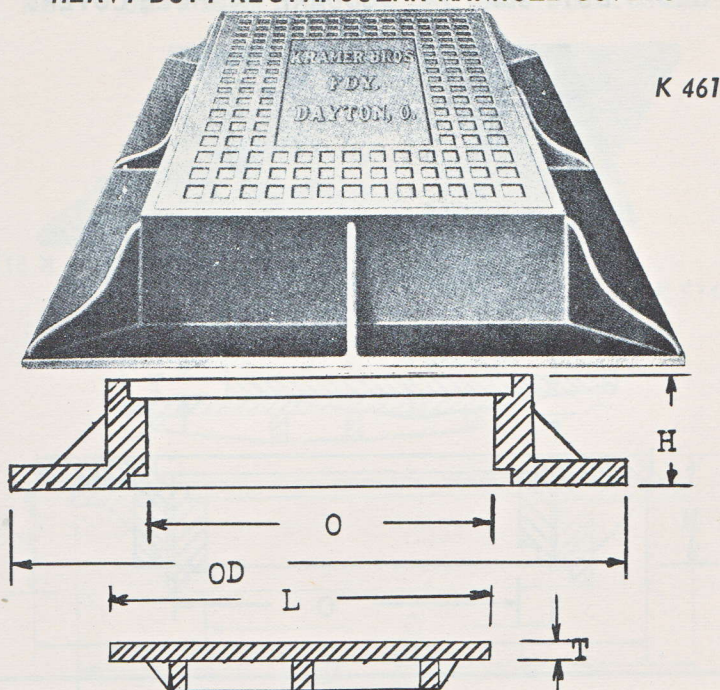


K 419



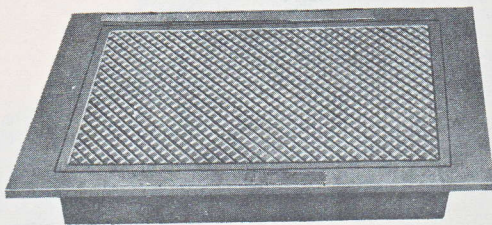
| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|-----------|-----------|---------------|-----------|-----------|---|-----|
| K 412 | 11 x 11 | 12 x 12 | $\frac{3}{4}$ | 14 x 14 | 21 x 21 | 8 | 125 |
| K 414 | 13 x 13 | 14 x 14 | $\frac{3}{4}$ | 14 x 14 | 18 x 18 | 2 | 58 |
| K 416 | 14½ x 14½ | 15½ x 15½ | $\frac{3}{4}$ | 15½ x 15½ | 20 x 20 | 3 | 55 |
| K 418 | 16½ x 16½ | 18 x 18 | $\frac{3}{4}$ | 18 x 18 | 21½ x 21½ | 3 | 85 |
| K 419 | 17 x 17 | 18 x 18 | $\frac{3}{4}$ | 20 x 20 | 28 x 28 | 5 | 225 |
| K 420 | 18½ x 18½ | 20 x 20 | $\frac{3}{4}$ | 20 x 20 | 24 x 24 | 3 | 105 |
| K 422 | 20½ x 20½ | 22 x 22 | $\frac{3}{4}$ | 22 x 22 | 26 x 26 | 3 | 135 |
| K 424 | 22 x 22 | 24 x 24 | $\frac{3}{4}$ | 24 x 24 | 34 x 34 | 7 | 375 |
| K 425 | 22 x 22 | 24 x 24 | 1 | 24 x 24 | 34 x 34 | 7 | 540 |
| K 428 | 26 x 26 | 28 x 28 | 1 | 30 x 30 | 36 x 36 | 6 | 460 |
| K 432 | 30½ x 30½ | 31½ x 31½ | 1 | 31½ x 31½ | 37½ x 37½ | 5 | 500 |
| K 436 | 36 x 36 | 37 x 37 | 1 | 37 x 37 | 42 x 42 | 5 | 400 |
| K 437 | 36 x 36 | 37 x 37 | 1 | 37 x 37 | 42 x 42 | 5 | 500 |

HEAVY DUTY RECTANGULAR MANHOLE COVERS

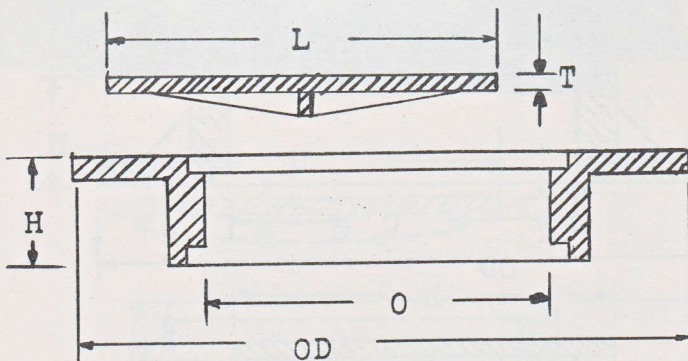


| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|-----------|-----------|----|-----------|-----------|----|------|
| K 451 | 6 x 12½ | 7 x 13½ | ¾ | 7½ x 14 | 14½ x 20½ | 6 | 85 |
| K 453 | 9¼ x 11¼ | 10¼ x 12¼ | ¾ | 10½ x 12½ | 15½ x 17½ | 4½ | 90 |
| K 455 | 13 x 27 | 14 x 28 | 1 | 14 x 28 | 20 x 30 | 3½ | 195 |
| K 457 | 16½ x 22½ | 18 x 24 | 1¼ | 18 x 24 | 24 x 30 | 4 | 265 |
| K 459 | 18½ x 30½ | 19½ x 31 | 1 | 19 x 31 | 24 x 36 | 3 | 185 |
| K 461 | 18 x 30 | 22½ x 35 | 1 | 24 x 36 | 36 x 48 | 9½ | 650 |
| K 463 | 22 x 30 | 24 x 32 | ¾ | 24 x 32 | 32 x 40 | 5 | 380 |
| K 465 | 22½ x 34½ | 24 x 36 | ¾ | 24 x 36 | 30 x 42 | 4 | 325 |
| K 467 | 22½ x 34½ | 24 x 36 | 1 | 24 x 36 | 30 x 42 | 4 | 420 |
| K 469 | 24 x 27 | 25½ x 28½ | 1 | 25½ x 28½ | 32 x 35 | 5 | 320 |
| K 471 | 24 x 42 | 25½ x 44 | ¾ | 25½ x 44 | 32 x 50 | 4 | 390 |
| K 473 | 24 x 42 | 25½ x 44 | ¾ | 25½ x 44 | 32 x 50 | 4 | 425 |
| K 475 | 24 x 28 | 26 x 30 | 1 | 26 x 30 | 36 x 40 | 11 | 835 |
| K 477 | 24 x 51 | 27 x 54 | 1½ | 25 x 52 | 41 x 68 | 6 | 580 |
| K 479 | 25 x 37 | 30½ x 42½ | ¾ | 32 x 44 | 50 x 62 | 11 | 1300 |
| K 481 | 35 x 47 | 36 x 48 | ¾ | 36 x 48 | 42 x 54 | 4 | 400 |
| K 483 | 35 x 47 | 36 x 48 | ¾ | 36 x 48 | 42 x 54 | 4 | 500 |
| K 485 | 42½ x 54½ | 44½ x 55½ | 1½ | 42 x 54 | 51½ x 63½ | 3½ | 1000 |

LIGHT DUTY SLAB TYPE SQUARE MANHOLE COVERS

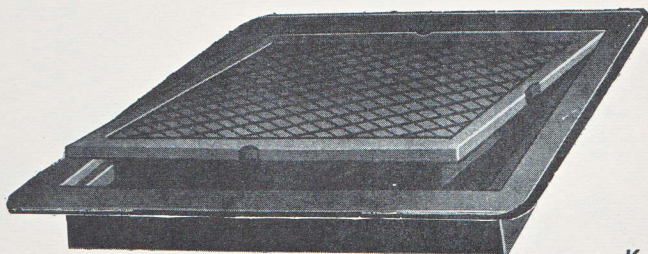


K 511

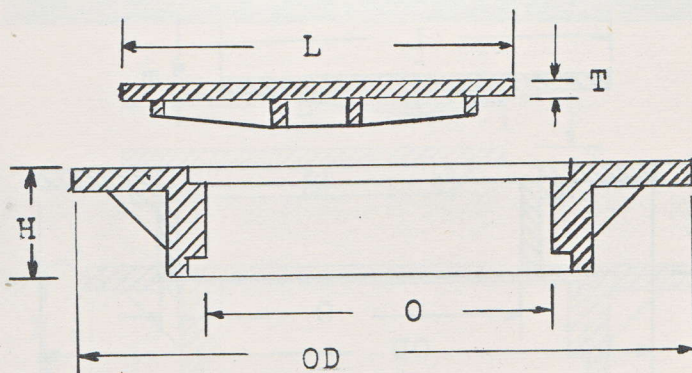


| Cat. No. | O | L | T | ID | OD | H | WT. |
|----------|-----------|-----------|---|-----------|-----------|----|-----|
| K 501 | 8 x 8 | 9 x 9 | ½ | | 11 x 11 | 4 | 20 |
| K 502 | 9 x 9 | 10 x 10 | ½ | | 12 x 12 | 1½ | 24 |
| K 503 | 10½ x 10½ | 11½ x 11½ | ½ | | 14½ x 14½ | 1½ | 26 |
| K 504 | 11 x 11 | 12 x 12 | ½ | | 14 x 14 | 4 | 40 |
| K 505 | 13 x 13 | 14 x 14 | ½ | 14 x 14 | 18 x 18 | 2 | 58 |
| K 506 | 14½ x 14½ | 15½ x 15½ | ½ | 15½ x 15½ | 18 x 18 | 1½ | 55 |
| K 507 | 16½ x 16½ | 18 x 18 | ½ | 18 x 18 | 21½ x 21½ | 2 | 85 |
| K 508 | 18½ x 18½ | 20 x 20 | ½ | 20 x 20 | 24 x 24 | 1½ | 105 |
| K 509 | 20½ x 20½ | 22 x 22 | ½ | 22 x 22 | 26 x 26 | 1½ | 120 |
| K 510 | 22½ x 22½ | 24 x 24 | ½ | 24 x 24 | 28 x 28 | 1½ | 135 |
| K 511 | 22½ x 22½ | 24 x 24 | ½ | 24 x 24 | 28 x 28 | 5 | 150 |
| K 512 | 26½ x 26½ | 28 x 28 | ¾ | | 30 x 30 | 2½ | 250 |
| K 513 | 28½ x 28½ | 30 x 30 | ¾ | | 32 x 32 | 1½ | 210 |
| K 514 | 28½ x 28½ | 30 x 30 | ¾ | | 32 x 32 | 3 | 235 |
| K 515 | 30 x 30 | 31½ x 31½ | ¾ | 31½ x 31½ | 37½ x 37½ | 5 | 400 |
| K 516 | 36 x 36 | 37 x 37 | ¾ | | 42 x 42 | 2 | 370 |

HEAVY DUTY SLAB TYPE SQUARE MANHOLE COVERS

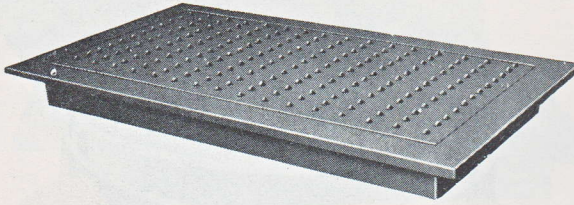


K 534

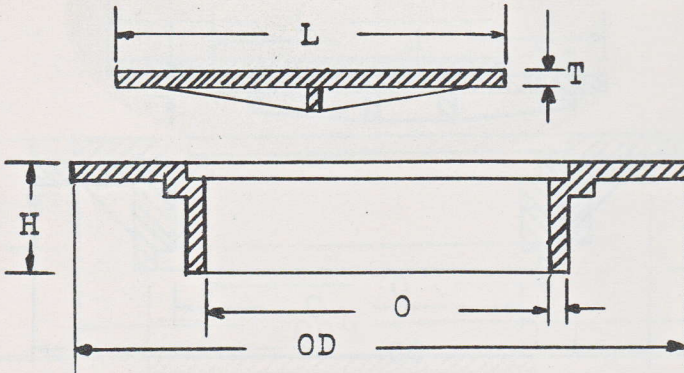


| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|-----------|-----------|----|-----------|-----------|---|-----|
| K 525 | 10½ x 10½ | 11½ x 11½ | ¾ | | 14½ x 14½ | 2 | 30 |
| K 526 | 12 x 12 | 14 x 14 | 1½ | | 16½ x 16½ | 3 | 135 |
| K 527 | 12½ x 12½ | 13½ x 13½ | ¾ | | 15½ x 15½ | 2 | 50 |
| K 528 | 14½ x 14½ | 15½ x 15½ | ¾ | | 18 x 18 | 2 | 70 |
| K 529 | 17 x 17 | 18 x 18 | ¾ | | 21½ x 21½ | 4 | 85 |
| K 530 | 19 x 19 | 20 x 20 | ¾ | | 24 x 24 | 4 | 105 |
| K 531 | 21 x 21 | 22 x 22 | ¾ | | 26 x 26 | 4 | 135 |
| K 532 | 22½ x 22½ | 24 x 24 | ¾ | | 28 x 28 | 3 | 205 |
| K 533 | 22 x 22 | 24 x 24 | ¾ | 24 x 24 | 34 x 34 | 7 | 420 |
| K 534 | 22 x 22 | 24 x 24 | 1 | 24 x 24 | 34 x 34 | 7 | 540 |
| K 535 | 26½ x 26½ | 28 x 28 | 1 | | 30 x 30 | 2 | 310 |
| K 536 | 30½ x 30½ | 31½ x 31½ | 1 | 31½ x 31½ | 37½ x 37½ | 5 | 500 |
| K 537 | 36 x 36 | 37 x 37 | 1 | 37 x 37 | 42 x 42 | 5 | 500 |

LIGHT DUTY SLAB TYPE RECTANGULAR MANHOLE COVER



K 559



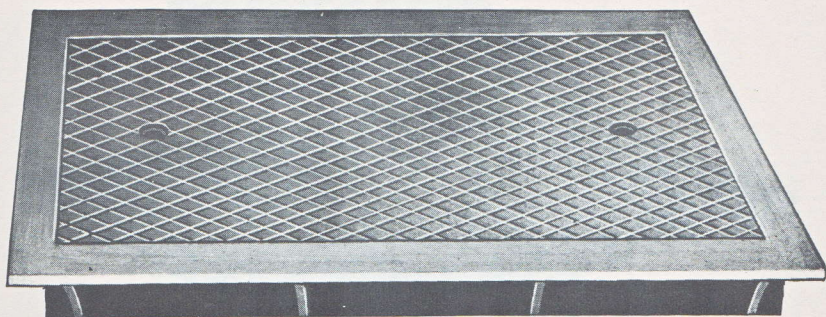
| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|-----------|-----------|---|-----------|-----------|----|-----|
| K 551 | 6 x 12½ | 7 x 13½ | ¾ | 7½ x 14 | 14½ x 20½ | 6 | 85 |
| K 553 | 9¼ x 11¼ | 10¼ x 12¼ | ¾ | 10½ x 12½ | 15½ x 17½ | 4½ | 90 |
| K 555 | 11 x 20 | 12 x 21 | ¾ | | 14 x 23 | 1½ | 70 |
| K 557 | 18 x 30 | 19 x 31 | ¾ | 19 x 31 | 24 x 36 | 3 | 185 |
| K 559 | 22½ x 34½ | 24 x 36 | ¾ | 24 x 36 | 30 x 42 | 4 | 325 |
| K 561 | 24 x 42 | 25½ x 44 | ¾ | 25½ x 44 | 32 x 50 | 4 | 380 |
| K 563 | 35 x 47 | 36 x 48 | ¾ | 36 x 48 | 42 x 54 | 4 | 420 |

Use Cast Iron Manhole Steps

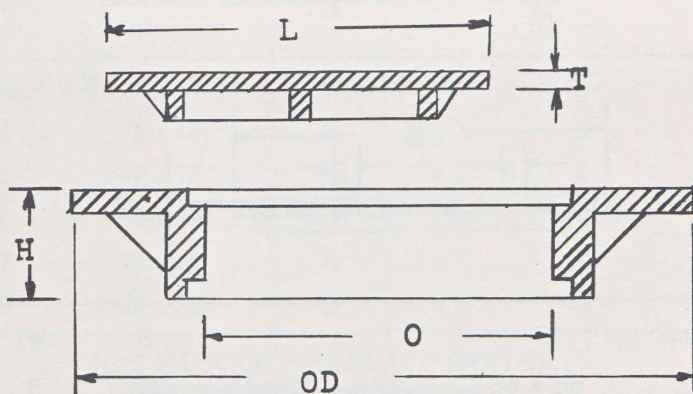
Rust and Corrosive Resistant

See Pages 5 and 6

HEAVY DUTY SLAB TYPE RECTANGULAR MANHOLE COVERS



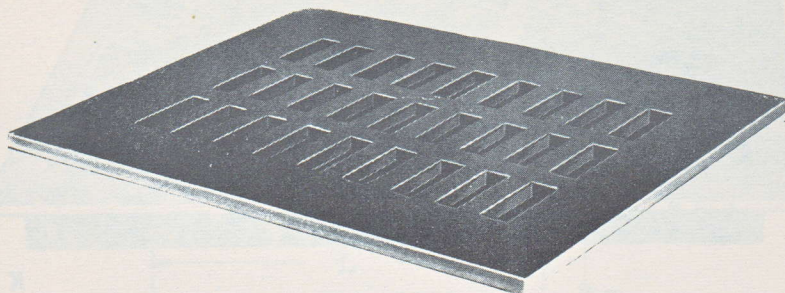
K 583



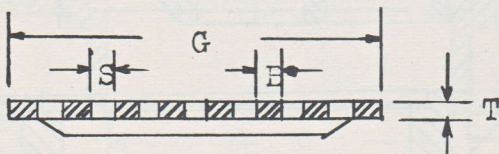
| Cat. No. | O | L | T | ID | OD | H | WT |
|----------|------------|-----------|----|-----------|---------|----|-----|
| K 575 | 16½ x 22½ | 18 x 24 | 1¼ | 18 x 24 | 24 x 30 | 4 | 265 |
| K 577 | 22 x 30 | 24 x 32 | 1 | 24 x 32 | 32 x 40 | 5 | 380 |
| K 579 | 22½ x 34½ | 24 x 36 | 1 | 24 x 36 | 30 x 42 | 4 | 420 |
| K 581 | 24 x 27 | 25½ x 28½ | 1 | 25½ x 28½ | 32 x 35 | 5 | 320 |
| K 583 | 24 x 42 | 25½ x 44 | 1 | 25½ x 44 | 32 x 50 | 4 | 425 |
| K 585 | 24 x 28 | 26 x 30 | 1 | 26 x 30 | 36 x 40 | 11 | 835 |
| K 587 | 35 x 47 | 36 x 48 | 1 | 36 x 48 | 42 x 54 | 4 | 500 |
| K 598 | *22½ x 22½ | *24 x 24 | 1 | *24 x 24 | 30 x 56 | 3 | 425 |
| K 599 | *22½ x 30½ | *24 x 32 | 1 | *24 x 32 | 31 x 73 | 5 | 725 |

* Made with double openings, double inside dimensions and double lids

LIGHT DUTY SQUARE GRATES



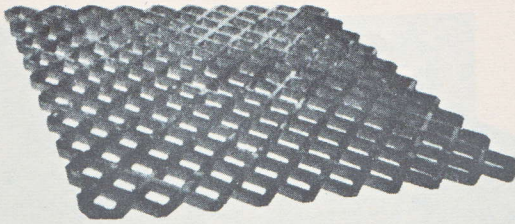
K 610



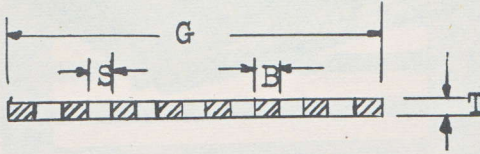
| Cat. No. | G | T | S | B | WT |
|----------|--------------------------------------|---------------|-------------------------|---------------|----|
| K 600 | $6\frac{1}{2} \times 6\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2} \times 4$ | $\frac{1}{2}$ | 3 |
| K 601 | 8×8 | $\frac{1}{2}$ | $\frac{1}{2} \times 3$ | $\frac{1}{2}$ | 7 |
| K 602 | 9×9 | $\frac{1}{2}$ | $\frac{1}{2} \times 3$ | $\frac{1}{2}$ | 7 |
| K 603 | 10×10 | $\frac{1}{2}$ | $\frac{1}{2} \times 4$ | $\frac{1}{2}$ | 9 |
| K 604 | $11\frac{1}{2} \times 11\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2} \times 4$ | $\frac{1}{2}$ | 12 |
| K 605 | $13\frac{1}{2} \times 13\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2} \times 3$ | $\frac{1}{2}$ | 16 |
| K 606 | 14×14 | $\frac{1}{2}$ | $\frac{1}{2} \times 3$ | $\frac{1}{2}$ | 20 |
| K 607 | $15\frac{1}{2} \times 15\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{1}{2} \times 6$ | $\frac{3}{4}$ | 30 |
| K 608 | 17×17 | $\frac{1}{2}$ | $2 \times 3\frac{1}{4}$ | $\frac{3}{4}$ | 35 |
| K 609 | 18×18 | $\frac{1}{2}$ | 1×7 | $\frac{3}{4}$ | 45 |
| K 610 | 20×20 | $\frac{1}{2}$ | 1×8 | $\frac{3}{4}$ | 55 |
| K 611 | 22×22 | $\frac{1}{2}$ | 1×6 | $\frac{3}{4}$ | 65 |
| K 612 | 24×24 | $\frac{1}{2}$ | 1×6 | $\frac{3}{4}$ | 85 |

All Grates are (CB) Cross Bar Design

DIAMOND GRATES FOR FLOOR GRIDS

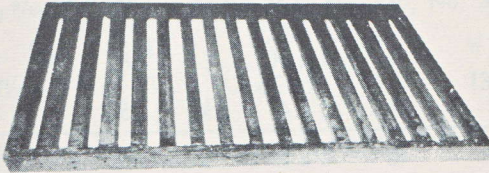


K 617

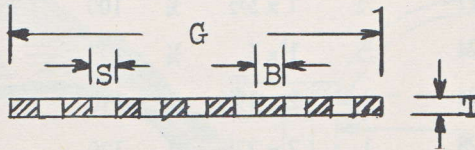


| Cat. No. | G | T | S | B | WT |
|----------|---------|---------------|-------|---------------|----|
| K 614 | 6 x 12 | $\frac{1}{2}$ | 2 x 2 | $\frac{3}{4}$ | 5 |
| K 615 | 12 x 12 | $\frac{1}{2}$ | 2 x 2 | $\frac{3}{4}$ | 10 |
| K 616 | 12 x 24 | $\frac{1}{2}$ | 2 x 2 | $\frac{3}{4}$ | 20 |
| K 617 | 24 x 24 | $\frac{1}{2}$ | 2 x 2 | $\frac{3}{4}$ | 40 |
| K 618 | 24 x 36 | $\frac{1}{2}$ | 2 x 2 | $\frac{3}{4}$ | 60 |

SIDE WALK OR FIREPLACE GRATES

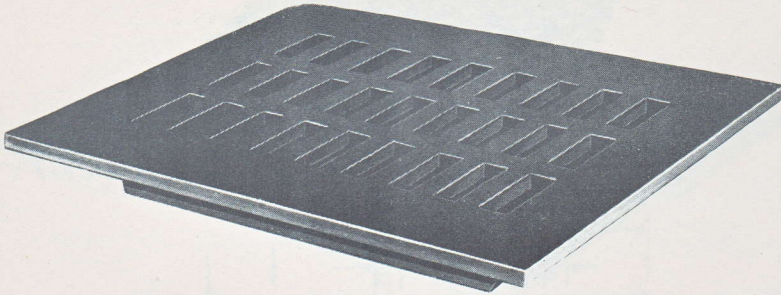


K 622

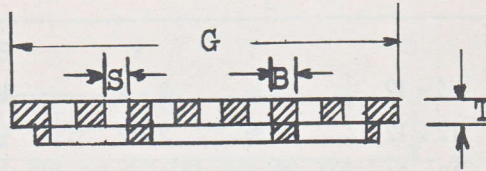


| Cat. No. | G (width) | T | S | B | G (length) | WT/Per/Ft. |
|----------|-----------------|---|---------------|---------------|-----------------------|------------|
| K 619 | $6\frac{1}{2}$ | 2 | $\frac{3}{4}$ | $\frac{1}{2}$ | $6\frac{1}{2}$ to 24 | 11 |
| K 620 | 8 | 1 | $\frac{1}{2}$ | $\frac{3}{4}$ | 8 to 36 | 14 |
| K 621 | 12 | 1 | 1 | $\frac{3}{4}$ | 12 to 36 | 20 |
| K 622 | 18 | 1 | 1 | $\frac{3}{4}$ | 18 to 36 | 31 |
| K 623 | $21\frac{1}{2}$ | 1 | 1 | $\frac{3}{4}$ | $21\frac{1}{2}$ to 36 | 38 |
| K 624 | 24 | 1 | 1 | $\frac{3}{4}$ | 24 to 36 | 42 |

HEAVY DUTY SQUARE GRATES



K 630

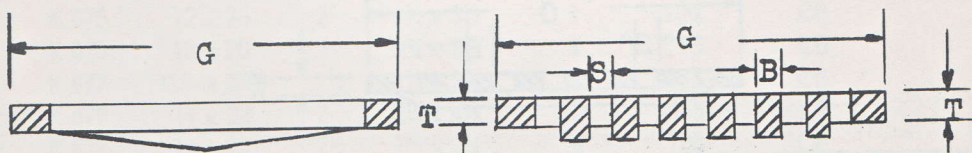
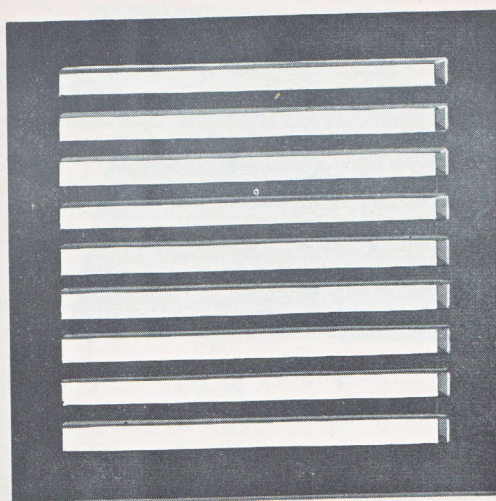


| Cat. No. | G | T | S | B | WT | Type |
|----------|---------|----------------|---------------------|---------------|-----|------|
| K 626 | 10 x 10 | 1 | 1 x 4 | $\frac{3}{4}$ | 25 | CB |
| K 627 | 12 x 12 | $\frac{1}{2}$ | 1 x $4\frac{1}{2}$ | $\frac{3}{4}$ | 30 | CB |
| K 628 | 14 x 14 | 2 | 1 x 10 | 1 | 38 | CR |
| K 629 | 18 x 18 | $\frac{1}{2}$ | 1 x 4 | $\frac{3}{4}$ | 65 | CB |
| K 630 | 20 x 20 | $\frac{1}{2}$ | 1 x 5 | $\frac{3}{4}$ | 80 | CB |
| K 631 | 22 x 22 | $\frac{1}{2}$ | 1 x $5\frac{1}{2}$ | $\frac{3}{4}$ | 100 | CB |
| K 632 | 24 x 24 | $\frac{1}{2}$ | 1 x 6 | $\frac{3}{4}$ | 125 | CB |
| K 633 | 24 x 24 | 1 | 2 x $19\frac{1}{2}$ | 1 | 110 | CR |
| K 634 | 28 x 28 | 1 | 2 x $23\frac{1}{2}$ | 1 | 130 | CR |
| K 635 | 29 x 29 | 1 | 2 x 4 | 1 | 100 | CB |
| K 636 | 34 x 34 | $1\frac{1}{2}$ | $\frac{3}{4}$ x 11 | $\frac{1}{2}$ | 175 | CB |

All Castings Asphalt Coated If Specified

Write for Prices and Information

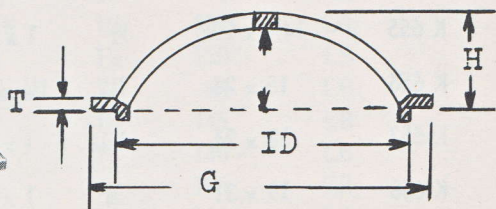
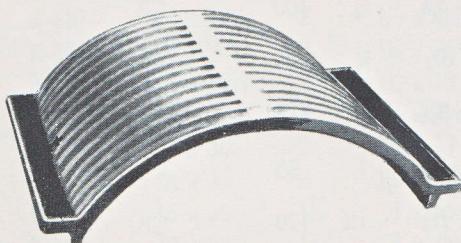
OHIO STANDARD ROADWAY GRATES



STANDARD CATCH BASIN GRATE

No. 2-2, No. 2-3, No. 2-4, No. 2-5, No. 2-6

| Cat. No. | G | T | S | B | WT. | Type |
|----------|-----------|---|---------|---|-----|------|
| K 634 | 27½ x 27½ | 1 | 2 x 23½ | 1 | 130 | CR |

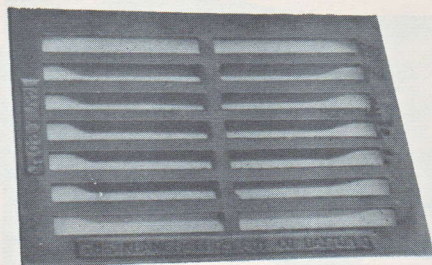


STANDARD CATCH BASIN GRATE

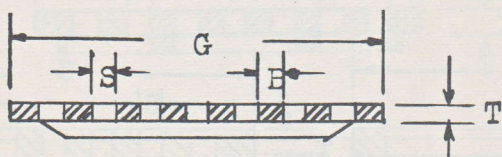
No. 1-2, No. 1-3 and No. 1-4

| Cat. No. | G | T | ID | S | B | H | WT. |
|----------|---------|---|---------|----|---|----|-----|
| K 649 | 23 x 28 | ¾ | 23 x 23 | 1½ | ¾ | 8½ | 92 |

LIGHT DUTY RECTANGULAR GRATES

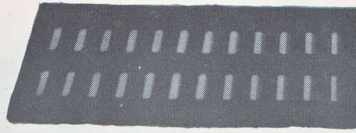


K 652

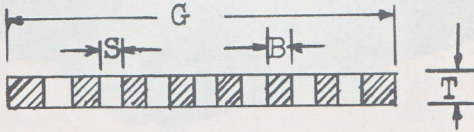


| Cat. No. | G | T | S | B | WT | Type |
|----------|-----------|----|---------|----|-----|------|
| K 651 | 12 x 24 | 1¼ | 1 x 4 | 1 | 65 | CB |
| K 652 | 12½ x 16½ | ½ | 1 x 7 | ½ | 25 | LB |
| K 653 | 14 x 24 | 1 | ¾ x 5 | 1 | 62 | CB |
| K 654 | 14 x 24 | 1¼ | 1¼ x 3¾ | ½ | 100 | CB |
| K 655 | 14½ x 20½ | ½ | 1 x 8½ | ¾ | 35 | LB |
| K 656 | 15 x 24 | 1¼ | 1¼ x 3¾ | ½ | 115 | CB |
| K 657 | 18 x 24 | 1¼ | 1 x 4½ | 1 | 85 | LB |
| K 658 | 19 x 31 | ¾ | 1 x 7½ | 1¼ | 120 | CB |
| K 659 | 24 x 36 | ¾ | 1 x 6½ | ¾ | 170 | CB |
| K 660 | 25 x 29 | 1 | 2 x 4 | ¾ | 85 | LB |
| K 661 | 25 x 29 | 1 | 1½ x 3½ | 1 | 125 | LB |
| K 662 | 28 x 52 | 1 | 2 x 23 | 1 | 230 | CR |

HEAVY DUTY RECTANGULAR GRATES

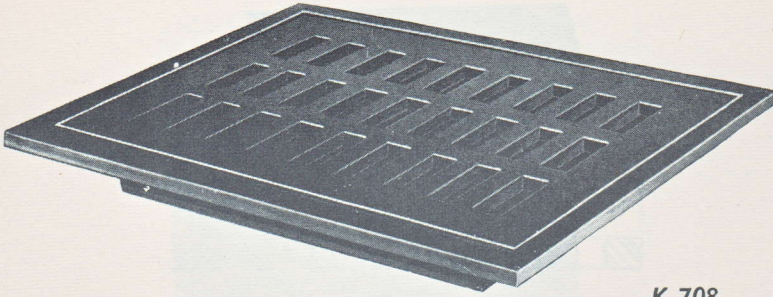


K 682

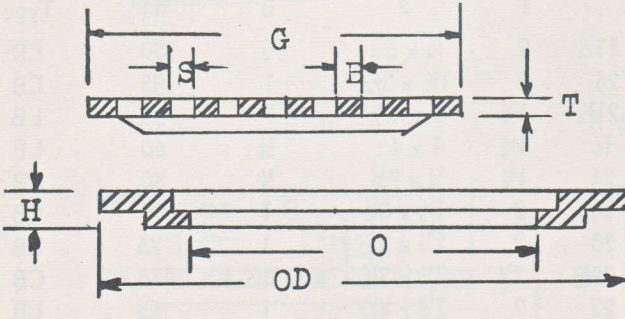


| Cat. No. | G | T | S | B | WT | Type |
|----------|-----------|----|----------|----|-----|------|
| K 670 | 6¾ x 13½ | 2 | ½ x 5¾ | ½ | 30 | CR |
| K 671 | 10 x 26 | 2 | 1½ x 3½ | 1 | 85 | CB |
| K 672 | 11½ x 21½ | 1¾ | 2 x 4½ | 1 | 55 | LB |
| K 673 | 12 x 16 | 1½ | 1 x 4 | ¾ | 60 | LB |
| K 674 | 12 x 24 | 1¾ | ¾ x 9¾ | ¾ | 80 | CR |
| K 675 | 12 x 26 | 2 | 1½ x 3½ | 1 | 100 | CB |
| K 676 | 13 x 20 | 2 | 2¾ x 3 | 1 | 75 | LB |
| K 677 | 13½ x 28½ | 2½ | 1½ x 3¼ | 1 | 115 | CB |
| K 678 | 14 x 22 | 2 | 2¼ x 4½ | 1 | 65 | LB |
| K 679 | 14 x 28 | 2½ | 1½ x 3¾ | ¾ | 100 | CB |
| K 680 | 14½ x 29½ | 2 | 1½ x 26½ | 1¼ | 120 | LR |
| K 681 | 14½ x 40 | 2½ | 1 x 3¾ | 1 | 170 | CB |
| K 682 | 15 x 24 | 1½ | ¾ x 5 | 1 | 130 | CB |
| K 683 | 15 x 30 | 1½ | 1 x 12 | 1 | 115 | CR |
| K 684 | 15 x 31 | 2½ | 1¾ x 3¾ | 1 | 140 | CB |
| K 685 | 15 x 40 | 2½ | 2½ x 4½ | 1 | 155 | LB |
| K 686 | 16 x 24 | 1¾ | 1 x 3¾ | 1¼ | 130 | CB |
| K 687 | 16½ x 21½ | 2 | 1½ x 4¼ | 1 | 90 | LB |
| K 688 | 16¾ x 29¾ | 2 | 1¼ x 26¾ | 1¼ | 130 | LR |
| K 689 | 16¾ x 29¾ | 2 | 1½ x 13 | 1¼ | 130 | LB |
| K 690 | 17 x 22 | 2 | 2¼ x 4¼ | 1 | 85 | LB |
| K 691 | 17 x 30 | 2 | 1¼ x 13 | 1¼ | 145 | LB |
| K 692 | 18 x 24 | 2 | 1¾ x 2¼ | 1 | 140 | LB |
| K 693 | 18 x 30 | 1½ | 1 x 15 | 1 | 135 | CR |
| K 694 | 20 x 24 | 1½ | 1 x 4½ | 1 | 130 | LB |
| K 695 | 20 x 31 | 2¼ | 1½ x 3¾ | 1 | 185 | CB |
| K 696 | 24 x 39 | 2 | 2¼ x 4 | 1 | 185 | LB |
| K 697 | 25 x 39 | 2 | 2¼ x 4 | 1 | 200 | LB |
| K 698 | 27 x 30 | 1½ | ¾ x 7½ | 1 | 180 | CB |
| K 699 | 30 x 33 | 2½ | 1½ x 3¾ | 1 | 240 | LB |

LIGHT DUTY SLAB TYPE SQUARE GRATE AND FRAME



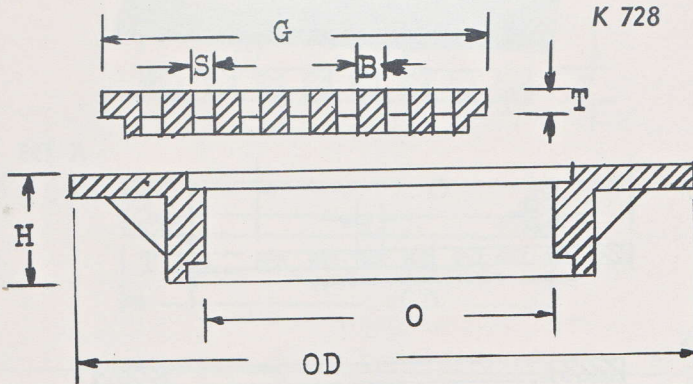
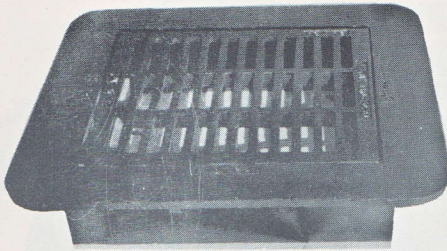
K 708



| Cat. No. | O | G | T | OD | H | S | B | WT |
|----------|-----------|-----------|---|-----------|----|--------|---|-----|
| K 700 | 7 x 7 | 8 x 8 | ½ | 9 x 9 | 1 | ½ x 3 | ½ | 12 |
| K 701 | 8 x 8 | 9 x 9 | ½ | 10 x 10 | 4 | ½ x 3 | ½ | 18 |
| K 702 | 9 x 9 | 10 x 10 | ½ | 12 x 12 | 1½ | ½ x 4 | ½ | 9 |
| K 703 | 10½ x 10½ | 11½ x 11½ | ½ | 14½ x 14½ | 1½ | ½ x 4 | ½ | 27 |
| K 704 | 12½ x 12½ | 13½ x 13½ | ½ | 15½ x 15½ | 1½ | ½ x 3 | ½ | 35 |
| K 705 | 14½ x 14½ | 15½ x 15½ | ½ | 18 x 18 | 1½ | ½ x 6 | ¾ | 55 |
| K 706 | 16 x 16 | 17 x 17 | ½ | 22 x 22 | 1½ | 2 x 3¼ | ¾ | 70 |
| K 707 | 17 x 17 | 18 x 18 | ½ | 21½ x 21½ | 1½ | 1 x 7 | ¾ | 75 |
| K 708 | 19 x 19 | 20 x 20 | ½ | 24 x 24 | 1½ | 1 x 8 | ¾ | 100 |
| K 709 | 21 x 21 | 22 x 22 | ½ | 26 x 26 | 1½ | 1 x 6 | ¾ | 115 |
| K 710 | 23 x 23 | 24 x 24 | ½ | 28 x 28 | 1½ | 1 x 6 | ¾ | 135 |

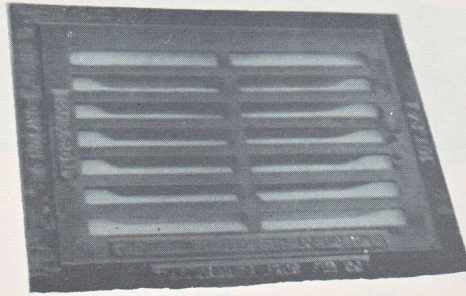
All Grates are (CB) Cross Bar Design

HEAVY DUTY SLAB TYPE SQUARE GRATE AND FRAME

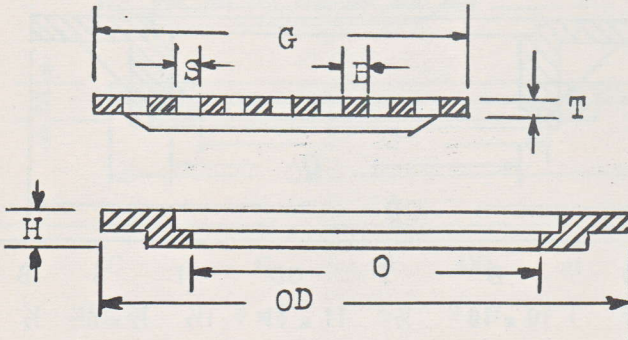


| Cat. No. | O | G | T | OD | H | S | B | WT | Type |
|----------|-----------|-----------|----|-----------|----|---------|---|-----|------|
| K 721 | 8 x 8 | 10 x 10 | ½ | 11 x 11 | 1½ | ½ x 6½ | ½ | 30 | CR |
| K 722 | 11 x 11 | 12 x 12 | ½ | 14½ x 14½ | 1½ | 1 x 4½ | ¾ | 60 | CB |
| K 723 | 12 x 12 | 14 x 14 | 1½ | 16½ x 16½ | 3 | 1 x 4½ | 1 | 120 | CB |
| K 724 | 14½ x 14½ | 15½ x 15½ | ½ | 18 x 18 | 1½ | 1 x 6 | ¾ | 70 | CB |
| K 725 | 17 x 17 | 18 x 18 | ½ | 21½ x 21½ | 1½ | 1 x 4 | ¾ | 95 | CB |
| K 726 | 19 x 19 | 20 x 20 | ½ | 24 x 24 | 1½ | 1 x 5 | ¾ | 125 | CB |
| K 727 | 21 x 21 | 22 x 22 | ½ | 26 x 26 | 1½ | 1 x 5½ | ¾ | 150 | CB |
| K 728 | 23 x 23 | 24 x 24 | ½ | 28 x 28 | 1½ | 1 x 6 | ¾ | 175 | CB |
| K 729 | 22 x 22 | 24 x 24 | 1 | 34 x 34 | 7 | 1 x 6 | ¾ | 415 | CB |
| K 730 | 22 x 22 | 24 x 24 | 1 | 34 x 34 | 7 | 2 x 19½ | 1 | 400 | CR |
| K 731 | 26 x 26 | 28 x 28 | 1 | 31 x 31 | 2½ | 2 x 23 | 1 | 240 | CB |
| K 732 | 27 x 27 | 29 x 29 | 1 | 33 x 36 | 1½ | 2 x 4 | 1 | 160 | CB |
| K 733 | 32 x 32 | 34 x 34 | 1½ | 40 x 40 | 4 | ¾ x 11 | ½ | 310 | CB |

LIGHT DUTY SLAB TYPE RECTANGULAR GRATE AND FRAME



K 755



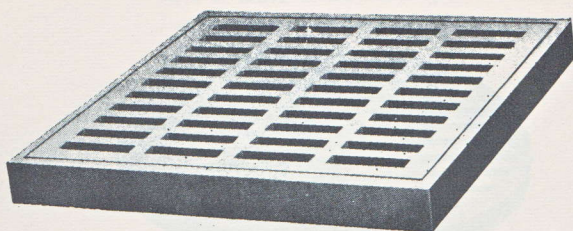
| Cat. No. | O | G | T | OD | H | S | B | WT | Type |
|----------|-----------|-----------|---|-----------|----|---------|---|-----|------|
| K 751 | 9¼ x 11¼ | 10¼ x 12¼ | ¾ | 15½ x 17½ | 4½ | 1 x 8 | ¾ | 90 | CR |
| K 753 | 11½ x 15½ | 12½ x 16½ | ½ | 16 x 20 | 1½ | 1 x 4 | ¾ | 50 | CB |
| K 755 | 13½ x 19½ | 14½ x 20½ | ½ | 18 x 24 | 1½ | 1 x 8½ | ¾ | 70 | CB |
| K 757 | 23½ x 27½ | 25 x 29 | ¾ | 30 x 34 | 1½ | 2 x 4 | 1 | 145 | CB |
| K 759 | 23½ x 27½ | 25 x 29 | ¾ | 30 x 34 | 1½ | 1½ x 3½ | 1 | 185 | CB |

All Castings Asphalt Coated If Specified

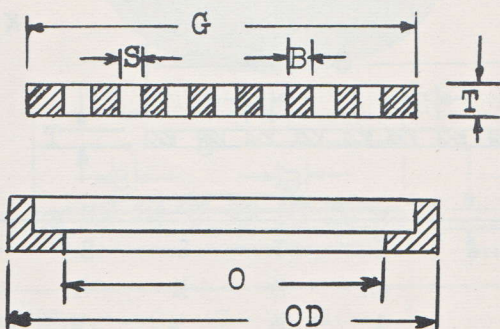
Please Order By Catalogue Number

Write for Prices and Information

HEAVY DUTY RECTANGULAR GRATE AND ANGLE TYPE FRAME

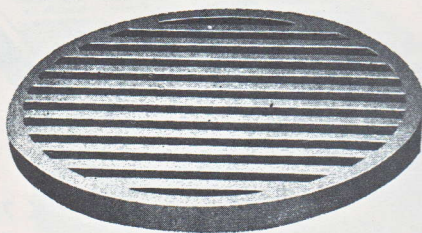


K 789

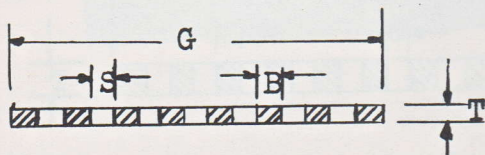


| Cat. No. | O | G | T | OD | S | B | WT | Type |
|----------|-----------|---------|----|---------|---------|----|-----|------|
| K 776 | 8 x 24 | 10 x 26 | 2 | 11 x 27 | 1½ x 3½ | 1 | 120 | CB |
| K 777 | 10½ x 14½ | 12 x 16 | 1½ | 13 x 17 | 1 x 4 | ¾ | 80 | CB |
| K 778 | 10 x 22 | 12 x 24 | 1¼ | 13 x 25 | 1 x 4 | 1 | 90 | CB |
| K 779 | 10½ x 22½ | 12 x 24 | 1½ | 13 x 25 | ¾ x 9¾ | ¾ | 110 | CR |
| K 780 | 10 x 24 | 12 x 26 | 2 | 13 x 27 | 1½ x 3½ | 1 | 150 | CB |
| K 781 | 13 x 23 | 14 x 24 | 1 | 15 x 25 | 1 x 3¾ | ½ | 85 | CB |
| K 782 | 12 x 22 | 14 x 24 | 1¼ | 15 x 25 | ¾ x 5 | 1 | 130 | CB |
| K 783 | 13 x 22 | 15 x 24 | 1½ | 16 x 25 | ¾ x 5 | 1 | 145 | CB |
| K 784 | 13 x 28 | 15 x 30 | 1½ | 16 x 31 | 1 x 12 | 1 | 150 | CR |
| K 785 | 14 x 22 | 16 x 24 | 1¾ | 17 x 25 | 1 x 3¾ | 1¼ | 165 | CB |
| K 786 | 16 x 22 | 18 x 24 | 1¼ | 19 x 25 | 1 x 4½ | 1 | 130 | CB |
| K 787 | 16 x 28 | 18 x 30 | 1½ | 19 x 31 | 1 x 15 | 1 | 170 | CR |
| K 788 | 18 x 22 | 20 x 24 | 1½ | 21 x 25 | 1 x 4½ | 1 | 150 | CB |
| K 789 | 18 x 29 | 20 x 31 | 2¼ | 21 x 32 | 1½ x 3¾ | 1 | 235 | CB |
| K 790 | 25 x 28 | 27 x 30 | 1½ | 28 x 31 | ¾ x 7½ | 1 | 300 | CB |

LIGHT DUTY ROUND GRATES



K 812

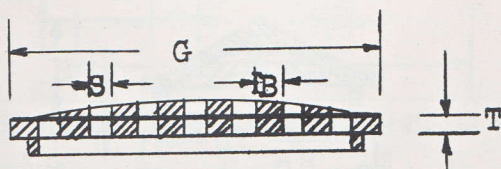
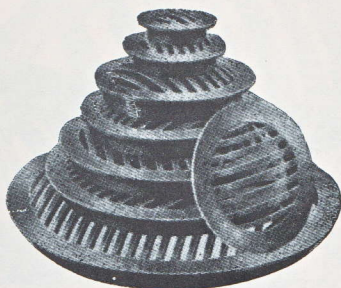


| Cat. No. | Pipe Size | G | T | S | B | WT |
|----------|-----------|----|---|---|---|----|
| K 801 | 4 | 4½ | ½ | ¼ | ½ | 1 |
| K 802 | | 5 | ½ | ¼ | ¼ | 1½ |
| K 803 | | 5½ | ½ | ¼ | ¼ | 2 |
| K 804 | | 6 | ½ | ½ | ½ | 2½ |
| K 805 | | 6½ | ½ | ½ | ½ | 3 |
| K 806 | | 7 | ½ | ½ | ½ | 3½ |
| K 807 | | 7½ | ½ | ½ | ½ | 4 |
| K 808 | 6 | 8 | ½ | ½ | ½ | 5 |
| K 809 | 8 | 9 | ¾ | ½ | ½ | 6 |
| K 810 | | 10 | ¾ | ½ | ½ | 8 |
| K 811 | | 11 | ¾ | ½ | ½ | 9 |
| K 812 | 10 | 12 | ¾ | ½ | ½ | 11 |
| K 813 | 12 | 13 | ¾ | ½ | ½ | 13 |
| K 814 | | 14 | ¾ | ½ | ½ | 15 |
| K 815 | | 15 | ¾ | ½ | ½ | 17 |
| K 816 | | 16 | ¾ | ½ | ½ | 20 |
| K 817 | | 17 | 1 | ½ | ½ | 23 |
| K 818 | 15 | 18 | 1 | ½ | ½ | 25 |
| K 819 | 18 | 19 | 1 | ½ | ½ | 28 |
| K 820 | | 20 | ¾ | ½ | ½ | 30 |
| K 822 | | 22 | ¾ | ½ | ½ | 40 |
| K 824 | | 24 | ¾ | ½ | ½ | 50 |

All Grates are (B) Bar Design

Quality Gray Iron Castings

LIGHT DUTY ROUND GRATES
To Fit Bell of Sewer Pipe
CONVEX BAR DESIGN



| Cat. No. | Pipe Size | G | T | ID | S | B | WT |
|----------|-----------|-----|---|-----|---|---|-----|
| K 830 | 4 | 6½ | ½ | 5 | ½ | ½ | 4 |
| K 831 | 6 | 9 | ½ | 7 | ½ | ½ | 8 |
| K 832 | 8 | 12 | ½ | 9½ | ½ | ½ | 13 |
| K 833 | 10 | 14 | ½ | 12 | ½ | ½ | 24 |
| K 834 | 12 | 16 | ½ | 14½ | ½ | ½ | 32 |
| K 835 | 15 | 20 | ½ | 18 | ¾ | ¾ | 45 |
| K 836 | 18 | 24 | ½ | 22 | ¾ | ¾ | 65 |
| K 837 | 20 | 26½ | ½ | 24 | ¾ | ¾ | 90 |
| K 838 | 24 | 32 | ½ | 28 | ¾ | ½ | 130 |

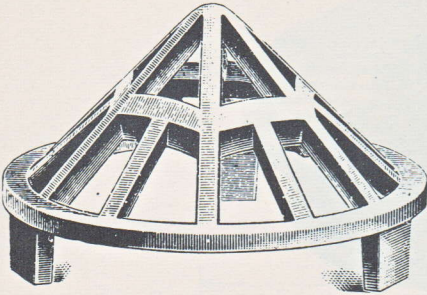
HEAVY DUTY ROUND GRATES
To Fit Bell of Sewer Pipe
CONVEX BAR DESIGN

| Cat. No. | Pipe Size | G | T | ID | S | B | WT |
|----------|-----------|----|---|-----|---|---|-----|
| K 839 | 15 | 20 | ¾ | 17½ | 1 | 1 | 70 |
| K 840 | 18 | 24 | ¾ | 21 | 1 | 1 | 100 |

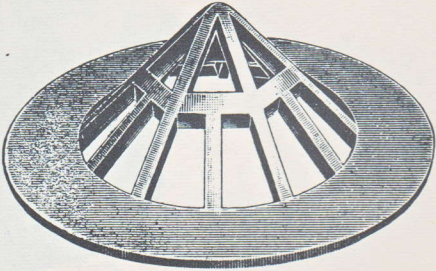
OHIO STANDARD ROADWAY SIDE DITCH GRATES

Without Flange

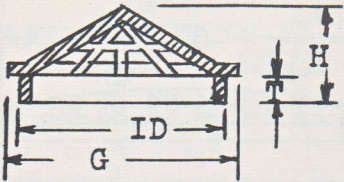
With Flange



K 845



K 849



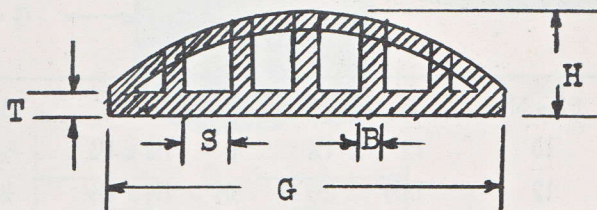
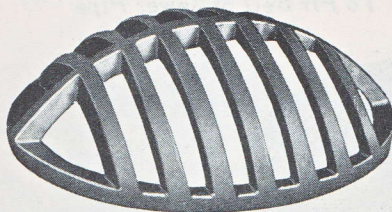
| Cat. No. | Pipe Size | G | T | ID | H | WT |
|----------|-----------|----|----|-----|----|----|
| K 841* | 6 | 7 | 2 | 6½ | 6½ | 5 |
| K 842* | 8 | 10 | 2¼ | 9½ | 7½ | 10 |
| K 843* | 10 | 12 | 2¼ | 11½ | 8 | 20 |
| K 844* | 12 | 14 | 2 | 13½ | 8½ | 26 |
| K 845* | 15 | 17 | 2¼ | 16½ | 9½ | 32 |

*Made without Flange to fit inside bell of sewer pipe

| | | | | | | |
|---------|----|----|---|----|----|----|
| K 846** | 8 | 13 | 2 | 9½ | 7½ | 17 |
| K 847** | 10 | 17 | 2 | 12 | 8 | 32 |
| K 848** | 12 | 19 | 2 | 14 | 8½ | 40 |
| K 849** | 15 | 22 | 2 | 17 | 9½ | 50 |

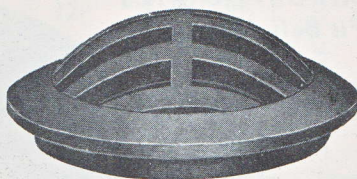
**Made with Flange to cover rim of sewer pipe

OHIO STANDARD ROADWAY GRATES

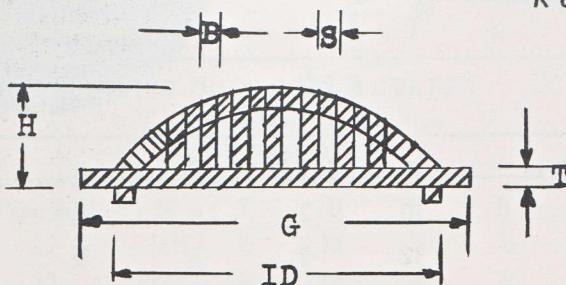


NO. 7 STANDARD SIDE DITCH CATCH BASIN GRATE

| Cat. No. | Pipe Size | G | T | H | S | B | WT |
|----------|-----------|----|---|----|---|---|----|
| K 850 | 15 | 22 | 1 | 6¼ | 2 | 1 | 80 |



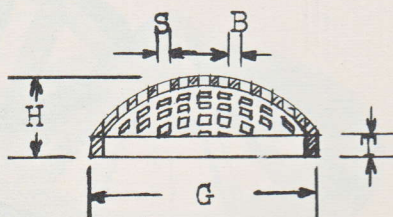
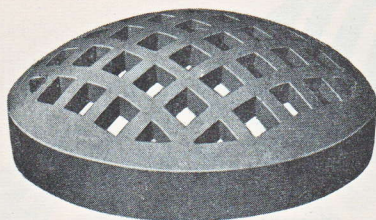
K 854



CROWN TOP SEWER GRATES

| Cat..No. | Pipe Size | G | T | ID | H | S | B | WT |
|----------|-----------|-----|---|-----|---|----|---|----|
| K 851 | 6 | 7½ | ½ | 5½ | 4 | 1¼ | 1 | 15 |
| K 852 | 8 | 10½ | ½ | 8½ | 4 | 1¼ | 1 | 20 |
| K 853 | 10 | 12½ | ½ | 10½ | 5 | 1¼ | 1 | 25 |
| K 854 | 12 | 14½ | ½ | 12½ | 5 | 1¼ | 1 | 30 |

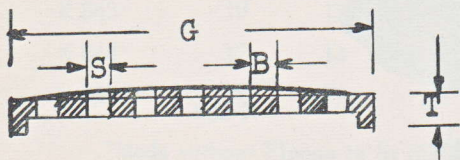
HEAVY DUTY BEEHIVE GRATES
To Fit Bell of Sewer Pipe



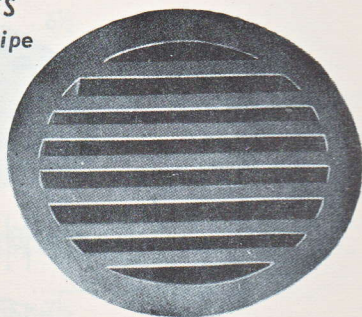
K 855

| Cat. No. | Pipe Size | G | T | H | S | B | WT |
|----------|-----------|-----|----|----|---------|---|-----|
| K 855 | 10 | 12 | 1¼ | 4 | 1¼ x 1¼ | ¾ | 25 |
| K 856 | 12 | 14½ | 2½ | 5½ | 1½ x 1½ | ¾ | 50 |
| K 857 | 15 | 18 | 2½ | 6 | 1½ x 1½ | ¾ | 75 |
| K 858 | 18 | 22 | 3 | 7 | 2 x 2 | 1 | 100 |
| K 859 | 24 | 29 | 3 | 9 | 2 x 2 | 1 | 170 |

LIGHT DUTY GRATES
To Fit Bell of Sewer Pipe



K 882



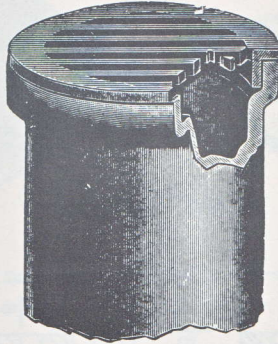
| Cat. No. | Pipe Size | G | T | S | B | WT |
|----------|-----------|-----|---|---|---|----|
| K 881 | 8 | 10 | 2 | ¾ | ¾ | 22 |
| K 882 | 10 | 12 | 2 | ¾ | ¾ | 25 |
| K 883 | 12 | 13½ | 2 | ¾ | ¾ | 30 |

All Castings Asphalt Coated If Specified

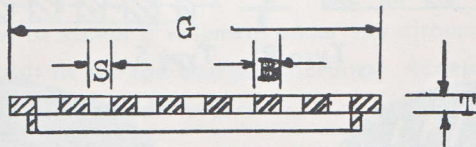
Write for Prices and Information

Quality Gray Iron Castings

MEDIUM DUTY ROUND GRATES
To Fit Bell of Sewer Pipe
FLAT BAR DESIGN



K 865



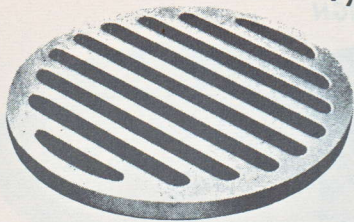
| Cat.-No. | Pipe Size | G | T | ID | S | B | WT |
|----------|-----------|-----|---|-----|---|---|----|
| K 861 | 6 | 9 | ½ | 7 | ½ | ½ | 8 |
| K 862 | 8 | 12 | ½ | 9½ | ½ | ½ | 13 |
| K 863 | 10 | 14½ | ½ | 12 | ½ | ½ | 24 |
| K 864 | 12 | 16½ | ½ | 14½ | ½ | ½ | 32 |
| K 865 | 15 | 20 | ½ | 18½ | ¾ | ½ | 45 |
| K 866 | 18 | 24 | ½ | 22 | ¾ | ½ | 75 |
| K 867 | 20 | 27 | ½ | 24 | 1 | ¾ | 90 |

HEAVY DUTY ROUND GRATES
To Fit Bell of Sewer Pipe
FLAT BAR DESIGN

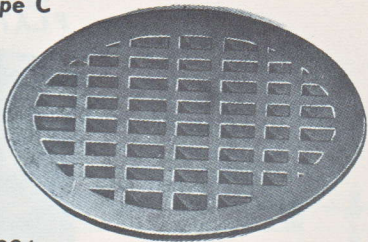
| Cat. No. | Pipe Size | G | T | ID | S | B | WT |
|----------|-----------|-----|----|-----|----|---|-----|
| K 870 | 12 | 16½ | ½ | 14 | ½ | ½ | 45 |
| K 871 | 12 | 17 | ½ | 14½ | ¾ | ¾ | 50 |
| K 872 | 15 | 20½ | ½ | 19 | 1½ | 1 | 60 |
| K 873 | 20 | 26 | 1 | 24 | 1 | 1 | 150 |
| K 874 | 24 | 32 | ¾ | 28½ | ¾ | ¾ | 200 |
| K 875 | 30 | 36 | 1¼ | 34 | 1 | 1 | 200 |

HEAVY DUTY ROUND GRATES

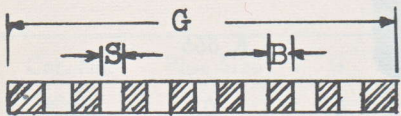
Type B Type C



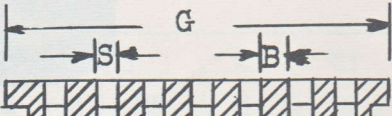
K 888



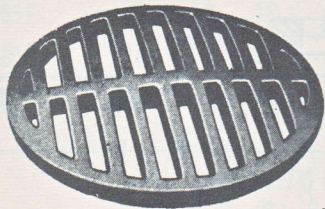
K 894



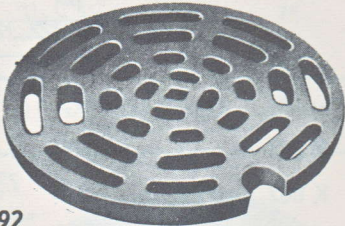
Type R



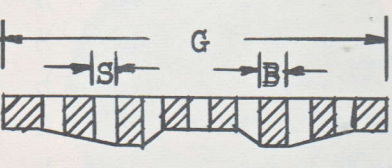
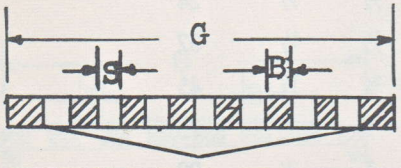
Type S



K 889



K 892



| Cat. No. | G | T | S | B | WT | Type |
|----------|-----|----|--------|---|-----|------|
| K 885 | 10 | 2½ | ½ | ½ | 13 | B |
| K 886 | 12 | 1½ | ½ | ½ | 18 | B |
| K 887 | 15 | 1 | ½ | ¾ | 38 | R |
| K 888 | 16½ | 2½ | 1½ | 1 | 60 | B |
| K 889 | 18 | 1¼ | ¾ | ¾ | 40 | R |
| K 890 | 18 | 1½ | 1 | 1 | 60 | S |
| K 891 | 21½ | 2 | 1¾ | 1 | 115 | C |
| K 892 | 22¼ | 1¾ | 1¼ | 1 | 120 | S |
| K 893 | 23¾ | 1 | 1¾ | 1 | 125 | C |
| K 894 | 24¾ | 1 | 1½ x 2 | 1 | 130 | C |
| K 895 | 26 | 2 | 1 | 1 | 155 | B |
| K 896 | 36 | 1¼ | 1 | 1 | 200 | R |

TERMS and CONDITIONS of SALE



Our TERMS to customers of established credit are net 30 days from date of invoice, f.o.b. Dayton, Ohio, unless otherwise specified.

We do NOT make C.O.D. shipments.

A statement of account is rendered to all customers the first of each month.

Never refuse to accept a shipment under any circumstances, as this will result in storage charges accruing. Accept the shipment and write us immediately.

Before accepting SHORT or DAMAGED shipments, be sure to have the carrier sign for the shortage or damage on the ORIGINAL freight bill, so that proper CLAIM can be filed.

Please DO NOT return castings without our permission. Advise us and we will give disposition. A handling charge is made on returned material which has not been shipped incorrectly.

Quotations must be accepted within 30 days from date of quotation. We are not responsible for failure to deliver as a result of fires, strikes, accidents or other causes beyond our control.



Quality Gray Iron Castings